



COLONIAL REPORTS

Northern Rhodesia 1951



LONDON: HER MAJESTY'S STATIONERY OFFICE
1952


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COLONIAL OFFICE

REPORT ON

NORTHERN RHODESIA

FOR THE YEAR

1951

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PRINTED BY THE GOVERNMENT PRINTER
LUSAKA, NORTHERN RHODESIA

1952

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HIS EXCELLENCY THE GOVERNOR, SIR GILBERT MCCALL RENNIE, K.C.M.G., M.C., AND
LADY RENNIE

PART I

Review of 1951

The question of the closer association of the two Rhodesias and Nyasaland overshadowed all other political matters in the Territory during 1951. A Conference of Officials of the three Central African Governments, of the Central African Council and of the Commonwealth Relations Office and Colonial Office was held in London during March to examine the problem in all its aspects and to consider whether it was possible, in the light of that examination, to formulate proposals for further progress to be made in the closer association of the three Territories which the officials could recommend to the Governments of the three Territories and to His Majesty's Government in the United Kingdom. The Conference was attended by six officials from Northern Rhodesia, who were led by the Chief Secretary, Mr. R. C. S. Stanley.

The report, which was unanimous, was published on the 13th June. Its main recommendation was that closer association between the three Territories should be brought about and that the need for it was urgent. It recommended that this be done, not by amalgamation, but on a federal basis, and it put forward in some detail a scheme designed to take particular account of the special features of the Central African situation, including the self-governing status of Southern Rhodesia, and to provide substantial safeguards for the interests of Africans. Moreover, the proposals in the report reserved to the Territorial Governments and Legislatures all the services which intimately affect African life and development.

In publishing this report the Governments concerned made it clear that they were not at that stage committing themselves to the acceptance of any of the particular proposals in the report, which they were publishing as a basis for consideration and discussion, but they stated that the proposals appeared to embody a constructive approach to the problem which deserved the careful consideration of all the peoples and Governments concerned. At the same time, it was announced that when there had been time for this consideration, the Secretary of State for the Colonies would visit Northern Rhodesia and Nyasaland to discuss the matter fully with representatives of the European and African inhabitants and other communities, and that the Secretary of State for Commonwealth Relations would visit Southern Rhodesia, after which they would both attend a joint conference with

Southern Rhodesia Ministers, and representatives of the Governments and European and African communities of Northern Rhodesia and Nyasaland.

Soon after the publication of the report it became clear that opinion in Northern Rhodesia was divided. Africans appeared to be opposed to the principle of federation, while the other communities were in favour of the principle and, in general, accepted the recommendations, though with some reservations.

The then Secretary of State for the Colonies, the Right Hon. J. Griffiths, toured the Territory from the 3rd to the 15th September. He visited Lusaka, the Copperbelt and all Provincial Headquarters, except Kasama, which he was obliged to omit from his itinerary by considerations of time and distance. In a very full programme, Mr. Griffiths held discussions with representatives of all communities in the Territory.

THE VICTORIA FALLS CONFERENCE

A Conference was held at the Victoria Falls Hotel from the 18th to the 21st September. The delegates from Northern Rhodesia, led by the Governor, Sir Gilbert Rennie, were four of the Official Members and all the four Unofficial Members of the Executive Council, including a nominated European representative of African interests, and the two African Members of the Legislative Council. On the 21st September, the Conference issued its final *communiqué* which stated, *inter alia*, that points of difference had been found to exist with regard to the principle of federation as well as to the proposals made in the report of the London Conference, and that it had become evident that further discussions within each Territory and exchanges of views between the four Governments would be necessary. The Conference had, therefore, adjourned with the hope of reassembling in London about the middle of 1952.

The delegates, with the exception of the African representatives, were favourable to the principle of federation. The representatives of African interests in Northern Rhodesia explained that Africans would be willing to consider the question of federation on the basis of the report of the London Conference, after the policy of partnership in Northern Rhodesia had been defined and, as so defined, put into progressive operation. The Conference endorsed the policy of economic and political partnership between Europeans and Africans as the only policy under which the federation could be brought about. It also expressed concern at the dangers which would flow from any weakening or dilution of the British connections and British traditions and principles in the three Territories, and agreed that they should be strengthened.

It had been made clear at the Conference that one of the main obstacles to the general acceptance of federation rested in the apprehensions felt by Africans in the two northern territories that federation might impair their position and prospects. In view of this the Conference agreed that if any form of closer association should eventually be decided on, certain rights should be enshrined as an integral part of the constitution. The first of these rights was that the protectorate status of the two northern territories should be accepted and preserved. The Conference recorded that this excluded any consideration, now or in the future, of amalgamation of the three territories unless a majority of the inhabitants of all three territories desired it. The second right was that land and land settlement questions in Northern Rhodesia and Nyasaland must remain as at present (subject to the ultimate authority of His Majesty's Government in the United Kingdom), the responsibility of the government and legislature in each territory and not of any federal authority, and that the land rights of the African people in Northern Rhodesia and Nyasaland must remain secured in accordance with the existing Orders in Council. The third right was that the political advancement of the people of Northern Rhodesia and Nyasaland, both in local and territorial government, must remain as at present (subject to the ultimate authority of His Majesty's Government in the United Kingdom), the responsibility of the government and legislature in each territory and not of any federal authority.

On the 21st November, the Secretary of State for the Colonies, Mr. Oliver Lyttelton, stated in the House of Commons that His Majesty's Government were convinced of the urgent need to secure the closer association of the three Central African Territories, and that they believed that this would best be achieved by federation. He said that His Majesty's Government having studied the statement issued at the conclusion of the Victoria Falls Conference were in full agreement with it, and endorsed the hope that the Conference would reassemble in London about the middle of 1952. He also stated the intention of His Majesty's Government to do all they could to help ensure that the intervening period would be used to advantage for necessary discussions in Central Africa.

In April, discussions on constitutional matters also took place in London between the United Kingdom Government and a delegation of Unofficial Members of the Northern Rhodesia Legislature. His Excellency the Governor accompanied the delegation which consisted of Mr. R. Welensky, Mr. G. B. Beckett and the two African Members, Mr. P. Sokota and Mr. D. Yamba. Later it was announced that the talks had been postponed pending consideration of the closer association report.

The composition of the Unofficial Members of the Legislative Council underwent changes during the year. Mr. Sokota and Mr.

Yamba were elected as African Members and, in February, Sir Stewart Gore Browne, Senior Unofficial Member and "Father" of the Council, announced his retirement. His place was taken by Mr. John Moffat who was nominated as a Member representing African interests. The two African Members and Mr. Moffat made their debut in the Legislature in July.

RECORD TRADE YEAR

The foreign trade of Northern Rhodesia during 1951 showed an unprecedented increase over the previous year. Imports totalled £35,377,000 as against £26,710,000 in 1950 while exports and re-exports amounted to £67,087,000 compared with £50,070,000 in 1950. The favourable visible trade balance therefore reached the high figure of £31,710,000 as against £23,360,000 in the previous year. The Territory's export trade was again dominated by copper, which represented about eighty-three per cent. of total exports during the year. The United Kingdom remained Northern Rhodesia's best customer and took goods to the value of nearly £39,000,000, an increase of £15,000,000. This rise was largely attributable to an increase in the price and in the volume of copper consigned to the United Kingdom. The value of exports to South Africa almost doubled the 1950 figure and amounted to £9,000,000 but sales of Northern Rhodesia produce to foreign countries fell by nearly £2,500,000 to £15,556,000, due mainly to decreased consignments of copper for refining in the United States. Imports from the United Kingdom in 1951 rose to £12,300,000 and covered a wide range of commodities, the chief of which were machinery, cotton piece goods and motor vehicles. Purchases from South Africa and Southern Rhodesia also rose considerably during the year. The total value of imports from British countries amounted to £29,500,000, an increase of £6,500,000 on the 1950 figure. The total imports from foreign countries rose from £3,763,000 to £5,821,000.

INDUSTRIAL EXPANSION

The expansion of industrial and commercial activity in the Territory was even more marked in 1951 than in the preceding year. During the year His Excellency the Governor opened a new brewery at Ndola, a co-operative creamery at Mazabuka and the new cement works at Chilanga, near Lusaka. The cement factory is owned jointly by the Northern Rhodesia Government and the Colonial Development Corporation, with a capital of £2,000,000. It is equipped to produce 50,000 tons of cement annually and plans are already in hand to treble the yearly output. Further increases in the number of factories during the year brought the total number operating in the Territory at the end

of 1951 to 198. There was a record number of eighty-six new registrations of local companies in 1951 and the total capital involved amounted to nearly £2,500,000. Among the new registrations were four new mining companies and fifteen engineering companies. The total nominal capital of the new mining companies was £700,000. Plans for considerable extension of mining activities were made during the year and it was announced that Economic Co-operation Administration funds had been voted for new copper projects at Mufulira. The practicability of developing a hydro-electric scheme in the Kafue Gorge was discussed in 1951. Progress on this project was begun before the end of the year and preliminary survey work was started.

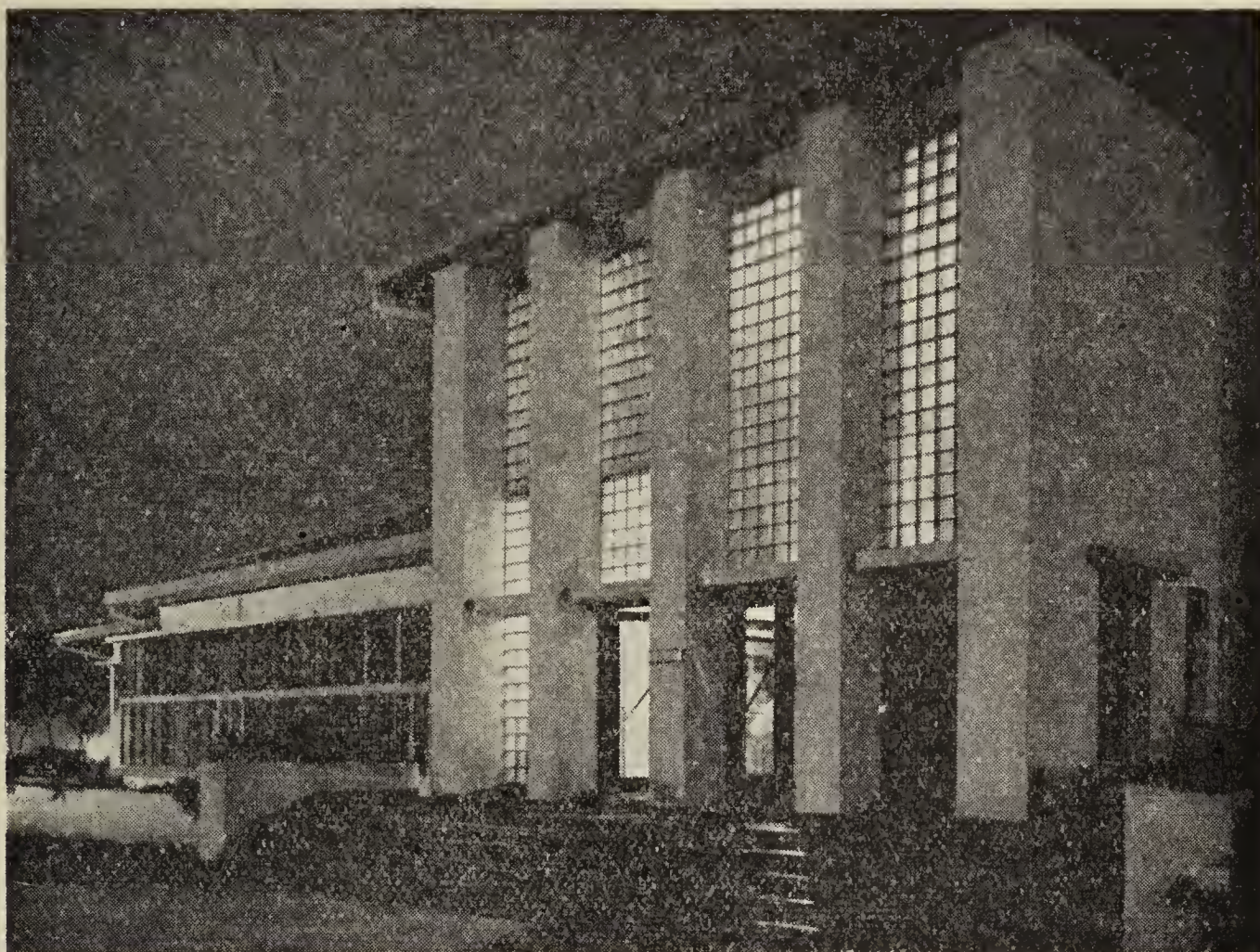
An increased output of copper and the higher prices realised for copper, lead and zinc were responsible for a big jump in the value of minerals produced during the year. The 1951 value of £72,277,038 represented an increase of forty-six and a half per cent. over the previous year's total. This brought the total value of minerals produced in Northern Rhodesia up to the 31st December, 1951 to £369,243,507. More than 5,000 Europeans and 40,000 Africans were employed in mining, by far the most important occupation in the Territory. Industrial relations throughout the country remained satisfactory and only one strike of African mine employees occurred which involved the loss of any considerable number of man-days. The flow of migrant workers to the copper mines continued during the year, particularly from Tanganyika Territory.

DROUGHT HITS MAIZE BELT

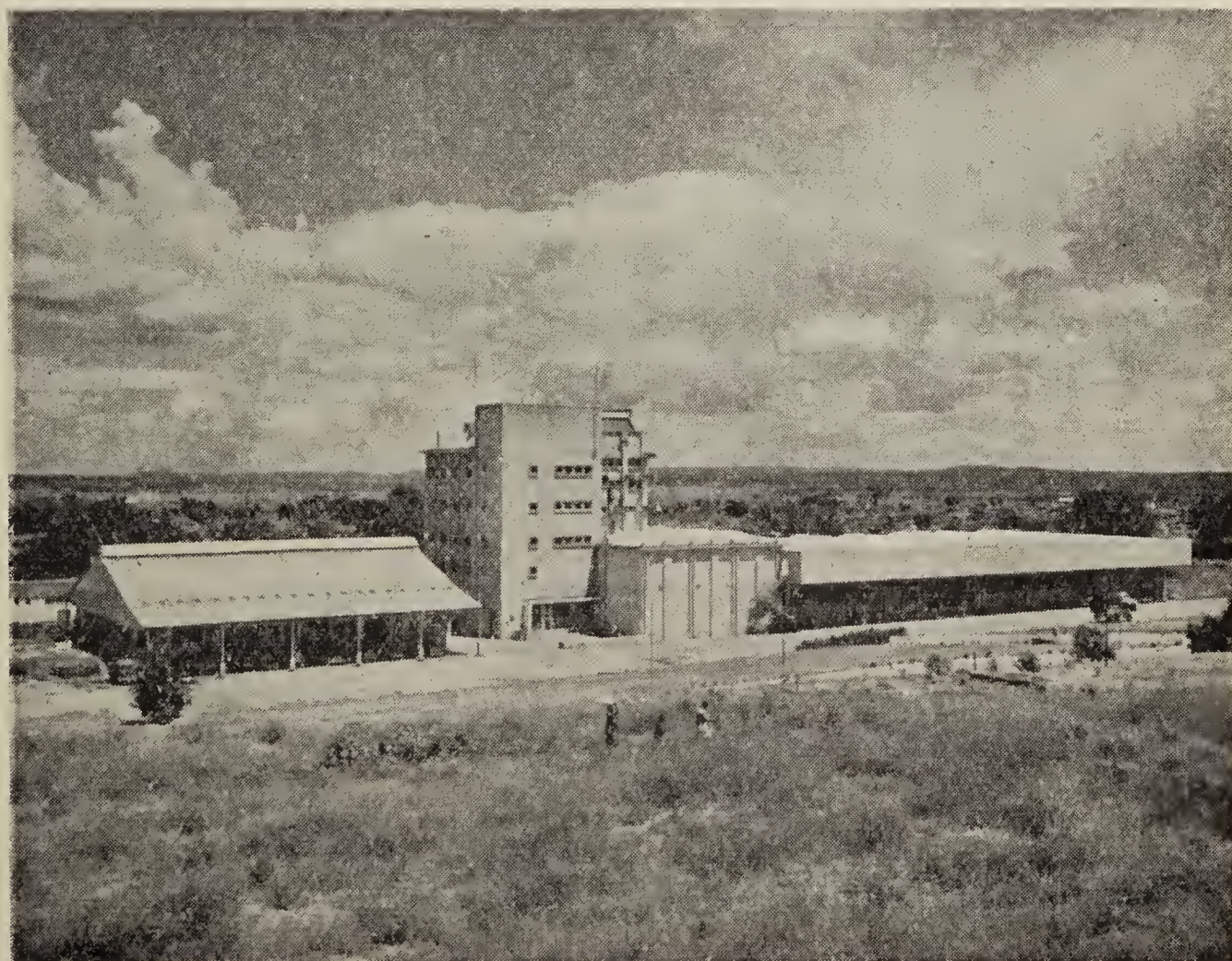
One of the worst droughts in recent years hit the maize belt and as a result production fell considerably short of consumption requirements. Fortunately, the shortfall was partly offset by a substantial carry-over from the previous season. It was estimated that the Territory's consumption of maize, which has increased rapidly in recent years, had reached a figure of 84,000 tons in 1951. The low rainfall and a cold winter also made the year less favourable to the livestock industry, but the general standard of animal health was satisfactory. In spite of the fact that the numbers of cattle sold for slaughter were greater than in the previous year, the demand for beef outstripped the supply and it was necessary to impose rationing. Dairy production improved under the stimulus provided by higher prices and the bonus paid by Government, but the increase was still a long way from meeting the territorial demand. Tobacco production, on the other hand, reached the record figure of over 11,000,000 lb. in 1951, an increase of more than 4,000,000 lb. on the 1950 crop, reflecting considerable expansion in the flue-cured tobacco industry. During the first part of the sales season prices remained attractive but towards the end of the sales there was a decline in the prices fetched for low and medium grade leaf.

SHORTAGE OF COAL SUPPLIES

There was a continued shortage of coal supplies for the Copperbelt in 1951 and the mines consumed nearly a million tons of wood fuel. Twenty-nine thousand acres were felled for this purpose and the main objective of the Forest Department during the year was the control of the extensive wood cutting for industry so that it did the least damage to the country's resources. The coal shortage was the cause of the mines having to close down for a few days in December and it was estimated that this cost the Territory more than £1,000,000. The total quantity of coal supplied to the copper mines was 466,256 tons in 1951 compared with 508,956 tons in 1950. In July an agreement was signed on behalf of the United Kingdom Government, the Economic Co-operation Administration and the Governments of Southern and Northern Rhodesia. Under this agreement the E.C.A. will make advances up to £5,000,000 to finance the Rhodesia Railways Development Programme. One of the conditions of the agreement is that when the total actual saleable production of coal at the Wankie Colliery in Southern Rhodesia reaches or exceeds 200,000 tons per month a specified percentage shall be allocated by the Southern Rhodesia Government to the Northern Rhodesia copper mines. Other commodities, besides coal, suffered because of transport difficulties. The congestion at the port of Beira was relieved during the year by improving handling facilities and by the careful marshalling of the entry of shipping by the Beira Imports Advisory Committee. One result of this improvement was that the sixty per cent. surcharge imposed by the shipping companies in 1950 was withdrawn. But, on the other hand, Northern Rhodesian traffic through South African ports was subject to serious delays. The general increase in traffic continued to tax the Railways to the utmost and the Umtali-Salisbury section was at times unable to carry all the traffic offering from Beira. During the year it was decided to introduce diesel electric locomotives on the Umtali-Salisbury sector and orders for twenty-three of these locomotives have been placed. One important long-term project approved by the Rhodesia Railways Higher Authority during the year was the provision of a link between Bannockburn in Southern Rhodesia and Guija in Portuguese East Africa to afford direct connection between the Rhodesias and the port of Lourenco Marques. An economic survey of the Bannockburn-Guija line was completed by an American firm of consultants and Rhodesia Railways started a physical survey of a proposed line between Sinoia in Southern Rhodesia and Kafue in Northern Rhodesia. These projects, when completed, should have an important bearing on the future development of Northern Rhodesia. As a result of an agreement between the Belgian Congo Railway Administration, the Benguela Railways and the Rhodesia Railways, through railway tariffs between the West Coast port of Lobito Bay and the Northern Rhodesia/Congo border were introduced in April—another step towards relieving the present congestion.



CHINGOLA'S MODERN HOTEL—PHOTOGRAPHED AT NIGHT



THE NEW BREWERY AT NDOLA

SUCCESSFUL "COMET" TRIALS

Communications generally improved during the year. Four firms of contractors and three Public Works Department construction teams were engaged on providing a bitumen surface for nearly 300 miles of road. The total expenditure incurred on road construction and maintenance during 1951 was nearly £800,000. Successful trials with the B.O.A.C. "Comet" were held both at Livingstone Airport and at the designated alternative airport at Lusaka. Visits were also made to the Territory by the Vickers "Viscount" turbo-prop airliner and a number of jet-engined fighter aircraft of the Royal Air Force. Improvements were made at Lusaka, Fort Jameson and Mankoya and plans for extending the runway at Ndola were completed. A considerable increase in scheduled and non-scheduled flights resulted in greater passenger and freight loads during 1951.

HEALTH SERVICES

Health services throughout the Territory improved steadily during the year and additional staff was recruited for the Health Department. Six more African urban clinics, three more mining companies' clinics (in financial conjunction with the Government) and ten more African rural health centres were brought into operation while two more Mission leprosy settlements were granted subsidies. Work also proceeded satisfactorily on the new modern hospital at Broken Hill, which will cater for all races. This hospital, which is considered to be one of the finest in Central and Southern Africa, will be opened early in 1952.

EDUCATION

The year showed another big increase in the numbers of European scholars attending Government and private schools in the Territory. The total of 6,942 included more than 5,000 enrolled at the twenty-two Government schools. Some 146,000 African children attended Government and assisted schools in 1951 and the estimated recurrent expenditure by the Government on African education was £499,000. Secondary and trades education formed an important part of the development programme of the Department of African Education. During the year a new Education Ordinance was introduced, aimed at placing more responsibility upon local communities for the administration of the African educational system. Compulsory education for African children in the Copperbelt and Ndola between the ages of twelve and sixteen, which had been in force since 1943, was abolished in July and a reorganised educational scheme for this area was inaugurated.

POPULATION

A census taken in May, 1951, showed that the European population of Northern Rhodesia had almost doubled itself since the last census was taken five years previously, the latest figure being 37,221. An estimate of the African population placed the total at 1,700,577 by the

end of the year. Nearly 7,000 European immigrants entered the Territory during the year, a slight decrease on the total for 1950.

The growth of the population in urban areas and increasing industrialisation are reasons why the progressive rise in the number of cases handled by the Police was maintained during 1951, when a total of 35,149 cases were heard. Convictions totalled 26,269, a decrease of 463 on the figure for the previous year.

Fifty-four Ordinances were enacted in 1951 including the Northern Rhodesia Cadet Corps Ordinance which provides for the establishment of a Cadet Corps at certain schools in the Territory. Other important Bills passed by the Legislature during the year included the Registration of Aliens Ordinance, the Pensions (Increase) Ordinance, the African Education Ordinance and the Income Tax (Amendment) Ordinance.

£100,000 GIFT FOR DEFENCE

In November the Legislature unanimously voted the sum of £100,000 as a Defence contribution to the United Kingdom on a motion by the Chairman of the Unofficial Members, Mr. Roy Welensky.

TOURIST DEVELOPMENT

It was not until 1949 that any serious attempt was made to encourage tourists to visit the Territory, but since then big strides have been made in tourist development. One of the most important projects is the Kafue National Park, which is already recognised as one of the most prolific game areas in Central Africa. Situated in the Southern and Central Provinces, this 8,000 square miles tract of land was demarcated in 1950 as a game sanctuary. It has been closed to the public until such time as roads have been made and rest camps erected at strategic centres. In 1951 this work proceeded satisfactorily and it is now proposed to open temporarily a section of the Park for the benefit of visitors to the Rhodes Centenary Celebrations in 1953. The Kafue National Park, well watered with rivers and lakes and teeming with wild life, should be ready for tourists early in 1954. Three new Game Reserves were gazetted in 1951, bringing the total in the Territory to twelve, which cover an area of 10,855 miles. Game conservation generally developed on satisfactory lines during the year.

COST OF LIVING

The cost of living continued to rise in 1951, the increase being reflected in the movements of the Index which rose from 157 in January to 165 in December. The cost of living allowance granted to Civil Servants was raised to sixteen per cent. by the end of the year. Owing to the rising costs of all types of household requirements, it was necessary to extend price control to cover a considerable number of new items. The effectiveness of price control in Northern Rhodesia is exemplified by the fact that the rise in the cost of living since 1949 has been relatively lower than in adjacent Territories.

IMPORTANT VISITORS

Apart from the then Secretary of State for the Colonies, Mr. J. Griffiths, a number of distinguished persons visited the Territory during the year. They included the Governor-General of the Belgian Congo, Monsieur de Jungers; the Prime Minister of Southern Rhodesia, Sir Godfrey Huggins; the Governor of Nyasaland, Sir Geoffrey Colby; the Commissioner for the Government of India in East Africa, Sri A. B. Pant; the Deputy Chairman of the British Red Cross Society, Lady Limerick; the Deputy Chairman of British Overseas Airways Corporation, Air-Commodore Whitney Straight; Professor Derwent Whittlesey, Professor of Geography at Harvard University, U.S.A.; Sir Frank Whittle, inventor of the jet engine; and Lieut-General Sir Arthur Dowler, who paid a farewell visit before his retirement as General Officer Commanding, East Africa Command. A British Parliamentary Delegation of two Labour and two Conservative Members of Parliament paid a visit during August, while other visiting delegations included members of the International Confederation of Free Trade Unions and a party of Italians who came out to investigate the possibilities of certain industrial, commercial and agricultural schemes. Music lovers welcomed the world famous cellist, Peers Coetmore, while the visit of Gwen Ffrangcon Davies, the celebrated Shakespearean actress, was extremely popular. In sporting circles the visits of Vic Toweel, world bantam-weight boxing champion, the team of British women golfers and the Danish badminton team were events of exceptional interest.

DEVELOPMENT PLAN

A review of the Territory's Ten Year Development Plan was completed during 1951 and was presented to the Legislative Council during November where it was accepted without amendment. The three main points in the review are (1) the rise in total cost from £19,000,000 to £36,000,000 of which the Territory is to provide £20,500,000 from revenue, the remainder being £2,500,000 from Colonial Development and Welfare Funds and £13,000,000 from Loans; (2) the excision of all but very short-term recurrent expenditure, thus creating virtually a capital works programme which lends itself to easy and rapid changes—an essential factor in the present financial position of the Commonwealth; and (3) the fact that, in addition to the large expenditure within the framework of the plan itself, the Territory is making quite considerable annual appropriations for other development, such as the Industrial Loans Board, Forest Fund, Power Projects Reserve and Geological Surveys, all of which are designed to diversify the economy. The speed of execution of the plan is still hampered by lack of staff and periodic shortages of materials, but these are slowly being overcome and it is expected that a rapid rate of progress will be maintained in future. A schedule of development schemes initiated or in progress during 1951 is published as Appendix I.

PART II

Chapter 1: Population

Northern Rhodesia's European population has almost doubled itself during the past five years. This was revealed when the preliminary figures of the 1951 census of population, taken on the 8th May, were announced. The total European population recorded on that day was 37,221, comprising 20,153 males and 17,068 females. The 1946 census had shown that there were 21,907 Europeans in the Territory, but that total included over 3,000 Polish evacuees, the majority of whom subsequently left the country.

The Western Province was shown as having the largest number of Europeans, the total of 20,450 reflecting an increase of over 8,500 on the 1946 figures, a greater increase than in any other Province. Other big increases were recorded in the Central Province, where the population had risen by over 4,000 to 10,047, and in the Southern Province where 4,781 Europeans were recorded, some 2,300 more than in 1946. The only Province which showed a decrease over the past five years was the Northern Province, whose European population in 1951 was 574 compared with 898 in 1946. This was due mainly to the fact that since 1946 the Fort Rosebery and Kawambwa Districts had been transferred from the Northern to the Western Province.

The census showed that 5,458 Europeans were living in the adjoining townships of Kitwe and Nkana and their immediate neighbourhoods. In terms of its European population, therefore, this centre now ranks, after Salisbury and Bulawayo, as the third largest in the two Rhodesias.

The 1951 census also showed that the total number of Coloured persons in Northern Rhodesia had increased since the last census from 804 to 1,092. The rate of increase was even higher among Asiatics whose population rose from 1,117 in 1946 to 2,529 in 1951.

Africans in employment on May 8th numbered 228,676, an increase of more than 87,000 on the 1946 figures. It was estimated that this total represented approximately 75 per cent. of the employable Africans in the Territory. The three major activities absorbing African employees were the mines (about 40,000), agriculture (about 35,000) and domestic service (about 30,000). These figures were not reflected in the census returns but were estimated by the Department of Labour

and Mines, according to whom there are also some 15,000 Africans now employed in the building trade and about 10,000 in factories. The total number of Africans in employment comprised 202,580 adult males, 17,776 juveniles and 8,320 females. This was the first census in which African juveniles were separately enumerated.

The total African population of Northern Rhodesia at the end of 1951 was estimated to be 1,700,577. Annual population estimates, population at census dates and figures showing European births, deaths, marriages and infant mortality are given in separate tables (see Appendix II).

IMMIGRATION

During 1951, 7,231 persons entered the Territory for the purpose of taking up residence. This figure is slightly lower than the record figure of 7,390 which was recorded in 1950. Provision does not exist which would permit the recording of accurate statistics of departures, but the results of the 1946 and 1951 censuses, together with the immigration statistics recorded during the intercensal period, seem to indicate that, at present, approximately one-third of the immigration is off-set by departures.

Included in the total of 7,231 were 338 Asiatic and 16 coloured persons. The remainder were of European descent; all but 204 entrants being of British nationality. Entrants numbering 1,759 were children under the age of sixteen years and the balance was made up of 3,281 males and 2,191 females. The majority of entrants were born in the Union of South Africa or the United Kingdom; the figures being 3,644 and 2,383 respectively.

Chapter 2 : Occupations, Wages and Labour Organisation

The most important occupation in Northern Rhodesia is mining, particularly copper mining. Out of an estimated gainfully employed European labour force of 16,000 there are 5,800 men employed in mining. The 1951 census figures showed that there are 228,000 Africans (male, female and juveniles) in employment in the Territory, of which 18 per cent. are employed in the mining industry, 16 per cent. in agriculture and 9 per cent. in Government service. Apart from these occupations the most important source of employment for Africans is domestic service in which some 30,000 persons are employed. The large labour force working in mining, and the prosperity of the copper mining industry in particular, exert a very great influence on conditions of employment throughout the Territory.

Wages

Broadly speaking, the wage rates for semi-skilled Africans range from 40s. to 100s. per month and for unskilled Africans from 25s. to 60s. per month, while those with special ability, such as trade-tested transport drivers, bricklayers, carpenters and typists can earn up to £17, and in specialist grades up to an indefinite amount, per month. All, excepting these latter type of workers, receive free food and housing or cash in lieu.

The average wage for thirty working days in the copper mining industry during December stood at 74s. as against 63s. 8d. in December, 1950, for surface workers, and 89s. 2d. as against 73s. 9d. for underground workers. Men in the highest group (special) are paid a comprehensive basic starting wage of 325s. (underground) and 290s. (surface) per ticket of thirty working days. The average monthly rate for Europeans employed on the copper mines at December, 1950, and December, 1951, was respectively £77 surface, £92 underground and £87 surface, £100 underground, but these figures do not include a copper bonus, based on the difference between cost of production and the selling price of copper.

Hours of Work

The standard hours of work in the private building industry remained at forty-eight per week but in practice few employers demand more than forty-five hours per week and some only forty hours. Government building employees worked a forty-five-hour week. In other industries a forty-eight-hour week was the normal though in the

cordwood cutting industry, where task work was common, workers could complete the task in three to four hours per day.

Cost of Living

During the year the major groups of necessary family expenditure, i.e., foodstuffs, clothing, footwear and household stores, rose steadily. The movement revealed by the Index was brought about mainly by the increase in the price of clothing and footwear. The number of points by which each group increased during the year was 10 (foodstuffs), 13 (clothing and footwear) and 9 (household stores). Since 1943 the increases have been 76, 102 and 56 points respectively.

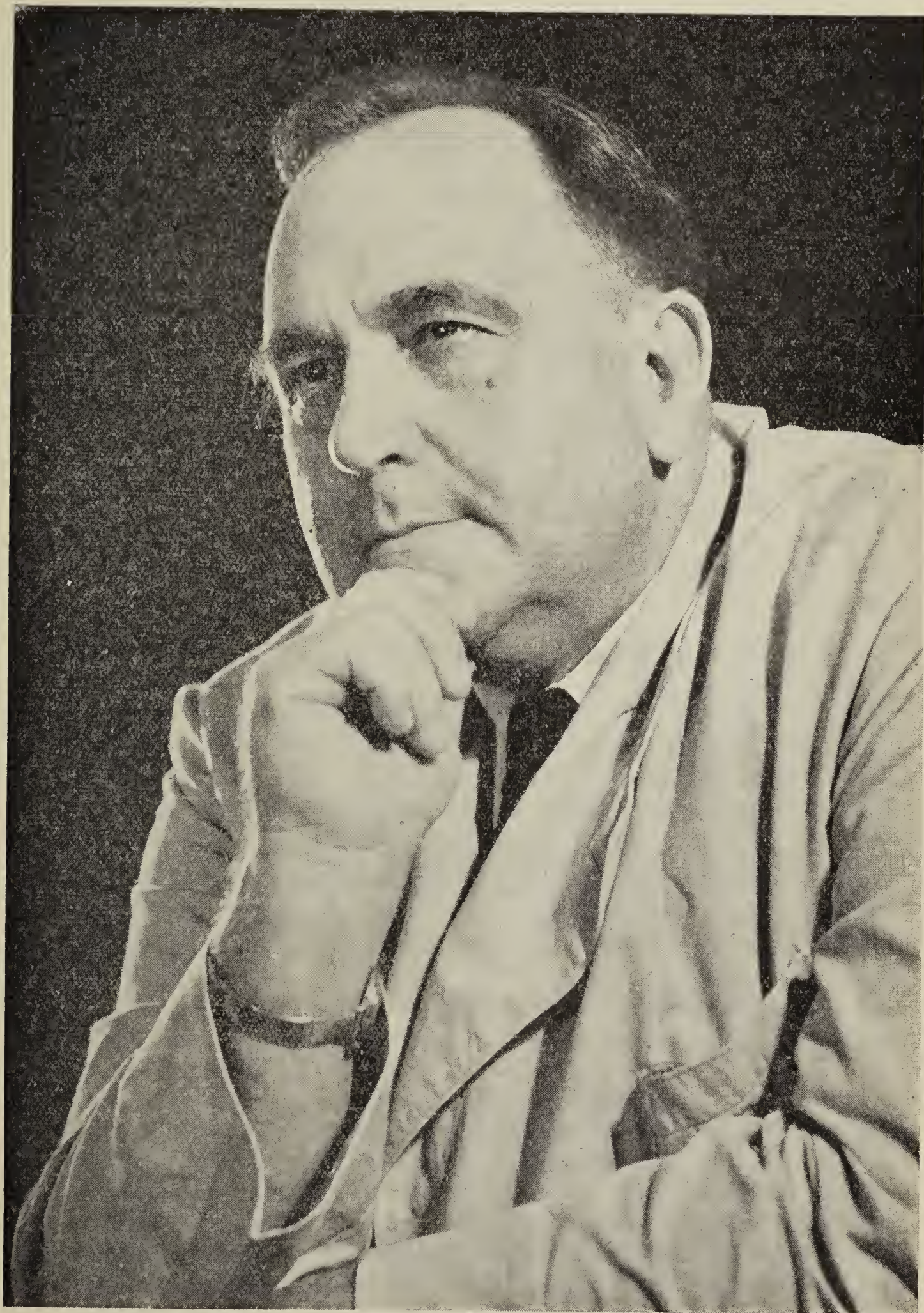
Labour Supply

The majority of Europeans in employment are necessarily recruited from outside the Territory, either from Southern Africa or from overseas. During 1951 there was a constant stream of applicants for employment in the copper mining industry, to only five per cent. of whom were the mining companies able to offer employment. Most of these applications were by letter. In other forms of employment there was a keen demand by employers for European labour possessing professional or technical qualifications. In Government service many vacancies could not be filled owing to the shortage of housing.

The demand for African labour increased steadily throughout the year and many employers had difficulty in obtaining their requirements. The agricultural industry was particularly affected since, although conditions of employment in that industry compared favourably with conditions offered by employers in urban areas, Africans are acquiring a taste for town life and prefer such life to work on farms. The Department of Labour and Mines operated a Central Employment Registry for Europeans, but due to lack of co-operation by employers in not notifying vacancies, the registry failed to serve the purpose for which it was established. The Department also operated a Labour Exchange service for Africans on a local basis. During 1951, 8,093 Africans registered with the Exchange and 4,373 were placed in employment; vacancies notified amounted to 9,494.

Trade Unions

European daily paid employees in the copper mining industry, and the lead and zinc mining industry at Broken Hill, are organised into the Northern Rhodesia Mineworkers' Union, and staff employees into the Mine Officials' and Salaried Staff Association. Other Unions representing European labour are the Rhodesia Railway Workers' Union, with headquarters at Bulawayo, Southern Rhodesia, and branches throughout the railway system in Northern Rhodesia;



MR. ROY WELENSKY, C.M.G., J.P., M.L.C.

the European Civil Servants' Association; and the Amalgamated Engineering Union. Nine African Trade Unions were in existence during the year, the most important being the Northern Rhodesia African Mineworkers' Trade Union which had a membership of some 26,000 persons. Two new African Trade Unions were formed during the year, one to represent employees of Local Authorities and the other to represent workers in hotels and similar establishments. The deduction of Union subscriptions from the payroll in the case of African miners resulted in increased membership and enabled members to keep their subscriptions up to date. The General Workers' Union, mainly composed of employees in the building industry, obtained an agreement through the Joint Industrial Council for similar arrangements, with the result that towards the end of the year membership was expanding rapidly. African Unions formed a Trade Union Congress which met on a number of occasions. Under its constitution membership is open to European Unions, but by the end of the year only African Unions had joined. As far as the smaller unions, such as the African Drivers' Union and the Shop Assistants' Union, were concerned the year was marked by spasmodic activity after long periods of stagnation.

The two main events during the year, as far as African Unions were concerned, were the visit to the Territory of a delegation from the International Confederation of Free Trade Unions and the departure, in November, of the General President and General Secretary of the African Mineworkers' Trade Union on a visit to the United Kingdom as guests of the National Union of Mineworkers.

At the end of the year there were between 40,000 and 50,000 African employees out of a total of 202,000 adult males working in various forms of industry, who were represented by Trade Unions. This represents just under twenty-five per cent. of the total African adult male workers.

Industrial Relations

Throughout the Territory these remained satisfactory and only one strike occurred which involved the loss of any considerable number of man-days, 65,916. In addition there were ninety strikes in which 10,896 man-days were lost. There were also twenty-nine disputes involving no loss of time. Of the ninety strikes, eighty had a duration of only one day, and ten lasted two to three days each. There were no strikes by European labour during the year. The twenty-nine disputes were settled without loss of working time although six were of a protracted nature and were referred to formal conciliation.

During the year a Committee was set up by Government to investigate the causes of dissatisfaction in both the European and African

Civil Services, and at the end of the year Government announced that it had decided to appoint a commission to review salaries.

The African Railway Workers' Trade Union held several meetings with representatives of the Management, culminating in conciliation proceedings before an inter-Territorial Board, composed of representatives of Northern Rhodesia and Southern Rhodesia. Agreement giving increased wages to African Railway employees in both countries was reached at those conciliation proceedings.

The Union representing African Employees of Local Authorities successfully negotiated an agreement with the Municipal Association to provide regulations governing procedure, discipline and general staff regulations on a uniform basis throughout the Territory. Negotiations regarding wages were pending at the end of the year. The year was one of considerable activity on the part of the African Mineworkers' Trade Union which not only continued to expand and improve its organisation, but also pressed forward in negotiations with the mining companies on a number of matters.

A Joint Industrial Council for the Building Industry met at regular intervals during the year. It was composed of representatives of the Master Builders' Association and the African General Workers' Trade Union, and functioned smoothly. A Minimum Wage Board was set up to consider and determine the pay and conditions of employment of Asian Shop Assistants; it had not reported by the end of the year.

Works Committees were established in the larger Government Departments. Similar Committees have been set up in some industrial undertakings, particularly where organised Trade Union representation is lacking.

Migrant Workers

The flow of migrant workers to the copper mines from outside the Territory continued during the year under review, particularly from Tanganyika Territory.

The number of Africans from Northern Rhodesia employed in Southern Rhodesia, shown by the 1951 census, was 46,240 adult males, 2,274 juvenile males and 1,822 native females, making a total employed of 50,336. These figures show that the numbers of adult Africans employed in Southern Rhodesia have only increased slightly since 1946 when the last census was taken, the figure then being 45,413. Twelve thousand, three hundred and thirty-seven Northern Rhodesia immigrants entered Southern Rhodesia during 1951, an increase of 2,764 compared with 1950, while 12,843 Africans returned to Northern Rhodesia from Southern Rhodesia. The movement in favour of Northern Rhodesia has been continuous for the last four years.

THE DEPARTMENT OF LABOUR AND MINES

The Department is organised in six sections, a Headquarters Section consisting of the Commissioner and three other officers apart from clerical staff. The field inspectorate of Labour Officers consists of twenty officers posted at stations on the line of rail, with one officer in the Fort Jameson farming area in the Eastern Province and one in Salisbury, Southern Rhodesia. The latter officer is responsible for safeguarding the interests of the many Northern Rhodesia Africans who are in employment in Southern Rhodesia. In addition there is a Labour Officer in Johannesburg, who is shared with Nyasaland, whose functions are similar to those performed by the Northern Rhodesia Government Labour Officer in Salisbury.

The Mines Inspectorate is a branch of the Department and the seven professional officers in that branch are all stationed at Ndola, which is within easy access of the four big copper mines. Other sections of the Department are Apprenticeship, Workmen's Compensation, Trade Testing and Central Employment Registry. The main function of the Labour branch of the Department is to promote good industrial relations and to see that the legislation passed for the protection of labour is properly observed.

GEOLOGICAL SURVEY

The Geological Survey remained attached to the Department of Labour and Mines during 1951. The Chief Geologist arrived in the Territory on transfer from Kenya Colony in April, and a third geologist came out in December. During the latter half of the year, a plan to expand the activities and personnel of the Geological Survey in order to intensify the investigation of mineral resources, was approved by the Legislature. It was agreed that, as from January 1st, 1952, a new Department of Geological Survey should be created.

Chapter 3: Public Finance and Taxation

Northern Rhodesia's estimated total revenue for 1951 amounted to over £15,500,000 and was expected to show an increase of about £3,500,000 over the revenue for 1950. In particular, revenue from Customs duties and Licences and Taxes was expected to reveal considerable increases over the previous year's figures.

It was anticipated that outgoings for the year of over £15,000,000 (excluding expenditure from the Development Fund) would amount to approximately £4,500,000 more than in the previous year and, while a proportion of the increase was expected to be accounted for by rising prices, the estimates allowed for greatly increased services to the public as shown by the comparative figures for African and European Education, Health, Posts and Telegraphs and Agriculture.

The sum of £15,000,000 mentioned above included appropriations amounting to £4,414,000, a figure almost double that of the previous year. Of this sum £1,500,000 was appropriated to the Development Fund and £1,500,000 to the Reserve Fund with a further £500,000 to assist local authority housing. Other appropriations included £250,000 to the Local Authorities' Loans Fund, £250,000 to the Industrial Loans Board and a further £250,000 for housing.

Expenditure from the Development Fund during the year was estimated to amount to over £4,500,000.

In March the Territory borrowed £7,730,000 on the London market for re-loan to the Rhodesia Railways. Stock was issued at 99 per cent., the rate of interest being $3\frac{1}{2}$ per cent. and the dates of redemption 1970/72.

Tables showing the comparative statements of revenue and expenditure for the past six years are given in Appendix IV.

CUSTOMS TARIFF

The Customs Tariff of Northern Rhodesia provides for two rates of duty, (i) general rates and (ii) preferential and Congo Basin rates.

Approximately one third of Northern Rhodesia (the north-eastern portion) lies within the conventional boundaries of the Congo basin and is subject to the Congo Basin Treaties under which the granting of preferential treatment to goods of any particular country is prohibited. Goods of Empire and foreign origin are admitted into this area at the lower or preferential rates. The Congo Basin area falls outside the scope of the customs agreements mentioned below.

The tariff rates have remained substantially unchanged since 1938 although the wording of the various items was extensively revised at the end of the year to conform with present day requirements. Provision is made for specific rates of duty on practically all foodstuffs, and on beer, potable spirits, tobacco, cement, coal and coke, candles, lubricating oils, paraffin, tyres and tubes, matches and blasting compounds. Other articles are subject to *ad valorem* duties on an f.o.b. value basis or are admitted duty free.

In November, 1947, the customs import duties on many important items, notably essential foodstuffs, blankets, carpets, clothing, piece goods, footwear and household requisites, were suspended in an endeavour to provide some relief against the rising cost of living.

The customs agreements concluded with the Union of South Africa (1930) and Southern Rhodesia (1933) have in the main remained unchanged. They provide for inter-Government transfers of customs duties on goods imported into one territory and subsequently removed to the other. Goods of local production or manufacture, with the exception of certain articles which are subject to customs duty at specially rebated rates, are interchanged without restriction and inter-Government payments on an *ad valorem* basis are made.

EXCISE AND STAMP DUTIES

Excise duty is leviable on spirits, sugar, playing-cards, ale, beer, stout, wine, matches and tobacco manufactured in the Territory. An additional excise duty is paid on cigarettes by means of surtax stamps affixed to the containers. This stamp duty is also applied to all imported cigarettes.

NATIVE TAX

The rates of annual tax vary from the lowest level of 6s. in the remotest rural areas to 15s. in the mining districts. The rate was based, in 1938, on the estimated average earning capacity of adult males in each area and not on an individual basis. Since then, despite a rise in the earnings of the average African, no increase in the Native Tax has been made in the rural areas, and it has been decided to provide for increased taxation by levies imposed by the Native Authorities, who would thus have larger funds and be able to take on increased responsibilities. During the year under review the decision was made that, in 1952, in the urban areas the rate of tax will be increased by 2s. 6d. Of this sum 1s. is intended to be a contribution towards the cost of welfare facilities in urban areas, and 1s. 6d. will be paid to the Native Authority of the taxpayer's home in lieu of his contributing to any levy which may be in force there.

INCOME TAX

Tax is levied for the year of assessment commencing on 1st April on income accruing in, derived from or received in Northern Rhodesia for the year immediately preceding the year of assessment.

Deductions : Individuals.

From total income the following deductions are allowed in arriving at chargeable income :

- (a) Personal deductions.—£500 for married persons and £250 for unmarried persons.
- (b) Deductions for children.—£150 in respect of each child.
- (c) Deduction for dependants.—The amount expended, with a maximum of £100 in respect of any one dependant, and further limited to the amount by which the dependant's income falls short of £250.
- (d) Insurance.—The annual premiums paid in respect of insurance on the lives of the taxpayer, his wife or minor children, or for sickness or accident are limited to one-sixth the difference between total income and £250, and further limited to £150.
- (e) Widows, or others similarly situated, who have custody of and maintain a child, receive the allowances and are taxed at the rates applicable to married persons.

Tables showing the rates of income tax and estate duty are given in Appendix III.

Chapter 4: Currency and Banking

Southern Rhodesia coin and currency notes issued by the Southern Rhodesia Currency Board are the only currency in circulation in Northern Rhodesia. The actual currency in circulation in any one of the three Central African Territories of Northern Rhodesia, Southern Rhodesia and Nyasaland cannot be accurately calculated. An estimate of the amount in circulation in Northern Rhodesia at the end of 1951 was £2,632,614 in notes and £581,792 in cupro-nickel coin, making a total of £3,214,406.

United Kingdom Currency

The amount of gold coin in circulation is negligible. Silver coin is gradually being withdrawn and Bank of England and United Kingdom currency notes are no longer accepted. A rough estimate of the silver coin in circulation is £2,000.

Foreign Currency

Foreign currency is not legal tender and is not issued.

Other Territories

A certain amount of East African Currency Board notes and coin imported by Africans is accepted by Government and is exchanged at par for Southern Rhodesia notes and coin collected in Tanganyika. Silver coin of the Union of South Africa is accepted by Government from Africans and repatriated at Government expense, while Belgian Congo notes and coin are accepted from Africans in the Northern Province and repatriated.

Commercial Banks

The Standard Bank of South Africa Limited and Barclays Bank (Dominion, Colonial and Overseas) have not issued currency notes since 1940 and there are very few in circulation.

BANKING

Barclays Bank (Dominion, Colonial and Overseas), with ten branches and one agency, and the Standard Bank of South Africa Limited, with ten branches and two agencies, conduct the banking business of Northern Rhodesia.

There is no land bank, but a Land Board financed by Government makes long and short term loans to farmers against various forms of security. A select committee recommended that a land bank should be formed at the earliest possible date and this recommendation has been



TROOPS OF THE 1ST K.A.R. MARCH PAST THE SECRETARIAT ON THEIR WAY TO LUSAKA STATION TO ENTRAIN FOR MALAYA



THE "COMET" LANDS AT LUSAKA ON A TRIAL FLIGHT

accepted by the Legislature. During 1951 a committee was appointed to advise on problems connected with the establishment of a land bank and its report is under consideration by Government.

The Barclays Overseas Development Corporation and the Standard Bank Finance and Development Corporation, subsidiaries of Barclays Bank (Dominion, Colonial and Overseas) and the Standard Bank of South Africa Limited respectively, provide finance of a medium or long term character for purposes of agricultural and industrial development and loans to local government bodies of a type which a commercial bank cannot be expected to undertake.

A Northern Rhodesia Industrial Loans Board has been formed and is financed by funds provided by Government. Its objects are to assist industry, except the farming section, with capital for varying purposes of development where other existing means of assistance are not available on reasonable terms, and for such time as may be necessary to achieve the object for which the aid has been given. During 1951, loans were approved to a total of £117,500, for such varying enterprises as engineering works, brickworks, joinery works, quarrying, dry cleaning and a tile factory.

The First Northern Rhodesia Permanent Building Society, which commenced operations in 1950, had a successful year. Deposits and loans received during 1951 amounted to £312,677 and £676,856 was advanced on mortgage. Total assets at the end of the year amounted to £959,874. Government has contributed to the share capital and has two representatives on the Board.

POST OFFICE SAVINGS BANK

The number of Post Offices conducting Savings Bank business increased in 1951 from forty-three to fifty, the offices to which facilities were extended being Chisamba, Feira, Kabompo, Kafue, Kapiri-Mposhi, Pemba and Shiwa N'gandu. New accounts registered during the year totalled 6,297 while 2,388 accounts were closed, increasing the number of depositors from 26,792 to 30,701. Transactions continued to increase and comparisons with the 1950 figures are given below:

Deposits			1950	1951
Number	.	.	47,012	52,719
Amount	.	.	£492,507	£531,096
Withdrawals				
Number	.	.	24,523	27,163
Amount	.	.	£325,677	£427,975

It is estimated that the balance due to depositors at the end of the year will approximate £1,000,000.

War Savings Certificates.

Repayments during the year were 22,995 units of a face value of £17,247 15s. 0d., the interest added being £5,170 3s. 2d.

Chapter 5 : Commerce

The year 1951 saw a continuation of the expansion of the trade of the Territory which has been a feature of its economy since the war, and both imports and exports reached new high levels. This expansion has not been achieved without having to face grave difficulties. The mining industry remains the main source of income and although progress has been made in recent years towards a more diversified pattern of industry, the Territory remains dependent for many essentials of life on imports. The supply of these to an inland country dependent on a single railway link connected to a few ports over great distances subjects the transport system to great strain. The ports upon which Northern Rhodesia depends have, moreover, to be shared with the developing economies of Southern Rhodesia and South Africa. The supply of essential imports to Northern Rhodesia was, therefore, dominated during 1951 by the problem of port capacity and railway transport.

The expansion in trade attained in spite of these difficulties represents, therefore, a considerable achievement. Decisions were taken during 1951 to provide additional railway and port facilities, but until these schemes can be carried out these problems will be the main factors limiting the development of the Territory, when opportunities for investment continue to increase.

The dependence on imports also means that the Territory is very sensitive to world conditions of supply and demand for the goods it requires. The increase in European population and the flow of Africans to the urban areas has required a great increase in building, resulting in a heavy demand for building materials. The position in regard to cement was greatly eased by the coming into production of the Chilanga Cement Factory with a production capacity of 50,000 tons a year, but the procurement of other building materials remained difficult. Nevertheless, although the shortage of roofing materials, iron and steel, and timber, in particular, necessitated the continuance of control over building, a great increase in the volume and value of building was achieved.

The increase in the European population and the rising standard of living of the African urban population necessitated increased importations of foodstuffs, notably wheat, butter, cheese and maize to supplement local production, which, despite expanded acreages, continues to fall behind demand.

Fuel supplies continued to present serious difficulties. In particular the supplies of coal from Wankie remained well below the requirements

of the mines, and there was little to spare for other industries. This led to a greater reliance on wood fuel, the transport of which resulted in an increased demand for imported petroleum and oil products, over and above that required for the normal expansion of traffic. Petrol remained rationed throughout the year, serious difficulties being experienced in August owing to a breakdown in railway communication with Beira.

International trade in 1951 was freer than for some years past, and in common with other countries, the Territory relaxed its import and export controls. Control was retained mainly with a view to ensuring that the best use was made of the limited number of dollars available, and to regulate the export of strategic materials and goods essential to the wellbeing of the Territory.

Although this chapter has necessarily outlined a number of difficulties facing commerce and industry in Northern Rhodesia owing to its geographical position and a communications system at present inadequate to the demands placed upon it, the statistics given in Appendix V record how great was the development of trade in the year under review.

In January, 1951, the old Civil Supplies Department was reformed as the Department of Trade, Transport and Industry, with the object among other things, of providing encouragement to the investment of capital in the Territory. During the year many projects received assistance from this Department, and an organisation is being developed which should prove of increasing assistance to industrialists, and others wishing to establish themselves in the Territory.

CO-OPERATIVE SOCIETIES

No new consumer co-operative societies were formed during 1951 but societies already established have continued to make good progress. There are European consumer societies at all the larger townships on the line of rail, with the exception of Livingstone and Broken Hill. Societies experienced difficulties in staff recruitment and administration but in the main their progress has been most encouraging. There are at present few African consumer societies. Ample enthusiasm for such societies exists but few Africans have as yet appreciated the difficulties which the establishment of a co-operative store involves, or the extent to which hard work is necessary by both committee members and staffs if a consumer society is to operate efficiently. In this connection difficulty has been experienced in obtaining the services of adequately trained African staffs for such societies, since few Africans in the Territory have sufficient knowledge of commerce or finance or even of commercial arithmetic and book-keeping.

Producer marketing and processing societies enjoyed a most successful year in spite of the relatively poor harvest. The established European societies continued to serve the European farming community efficiently. Most of the tobacco crop in the Western area was

marketed through co-operative societies, the Co-operative Creameries of Northern Rhodesia Limited continued to serve the dairy industry and the Agricultural Development Society (Co-operative) Limited continued to market maize, wheat, sunhemp, beans and sunflower seed. All these societies have performed a further useful function in providing short-term financial assistance to their members.

The African agricultural producer co-operative societies in the Eastern Province have continued to expand and this area remains the most advanced in the Territory from this point of view. Considerable progress has been made, however, in the Luapula/Bangweulu area of the Western Province, and in the Namwala district of the Southern Province, in both of which areas embryo co-operative organisations have operated for a full season with excellent results. On the Copperbelt the Lima Producers Co-operative Society, operating on a small scale in an area which has only limited possibilities, made good progress, dealing mostly in kaffir corn, which is the local staple crop. There is a small co-operative dairy society on the Copperbelt whose members are cattle owners near Ndola; this society has functioned satisfactorily with the assistance of the Veterinary Department.

There is considerable scope for the development of the co-operative movement in the building sphere but administrative difficulties have limited such expansion in the past. These difficulties have now been overcome to a certain extent by the formation of the co-operative housing association, C.H.A. Limited, which was formally registered in December, 1951.

Membership, share capital and turnover of co-operative societies as at 31st December, 1951 were as follows:

Type of Society	No.	Member- ship	Share Capital of Savings	Turnover
			£	£
(a) <i>European</i>				
Credit, with limited liability	1	180	9,763	—
Consumer and supply	6	3,290	144,846	422,362
Producers' marketing	5	1,035	114,745	610,371
Other	3	420	1,339	7,112
Totals	15	4,925	270,693	1,039,845
(b) <i>African</i>				
Other	1	20	—	—
Thrift and loan, with limited liability	13	325	2,366	—
Consumer and supply	20	3,545	5,458	36,203
Producers' marketing	48	6,754	1,385	104,994
Totals	82	10,644	9,210	141,197
<i>Combined totals</i>				
European and African	97	15,569	279,903	1,181,042

PRICE CONTROL

Control of the prices of a large range of necessities, as well as of rents, was under the supervision of the Price Controller, who was assisted by a full staff of experienced officers. The rising prices of all types of household requirements did not permit of any relaxation of control; on the contrary, it was necessary to extend it to cover a considerable number of new items. The variety of goods now affected by Price Control includes all general necessities including footwear, clothing, hardware, crockery and glassware, as well as most foodstuffs. The effectiveness of price control in Northern Rhodesia is borne out by the fact that the rise in the cost of living since 1949 has been relatively lower than in any adjacent territory.

COMPANY REGISTRATIONS

There were eighty-six new registrations of local companies in 1951, as against fifty-one in 1950, the highest previous figure. The total capital of the new companies (excluding one limited guarantee) was £2,429,099. During the year four companies went into voluntary liquidation, one was ordered by the High Court to be wound up, and two were struck off by the Registrar as no longer carrying on business. Foreign companies registered during the year numbered twenty-four, as compared with twenty-eight in 1950.

Amongst the local companies registered were four new mining companies, with a total nominal capital of £700,000; fifteen engineering companies, including motor firms, £431,999; fourteen general merchants and agents' businesses, £421,000; and nine estate agents or land development companies, £102,100.

MORTGAGES, BILLS OF SALE AND INSOLVENCIES

During the year there were 313 mortgages registered for £898,896, these figures by a coincidence being exactly the same as for 1950.

There were eight Bills of Sale valued at £21,646 registered during 1951 as against eleven Bills valued at £21,836 in 1950.

Eighteen persons were adjudicated bankrupt in 1951 compared with fourteen during the previous year.

Chapter 6 : Production

AGRICULTURE

The maize belt experienced one of the worst droughts in recent years. Effective rainfall ceased fully six weeks earlier than usual, and as a result, the total rainfall for the season was only fifteen to twenty-five inches in the maize belt and was in general more than ten inches below average. A total of 98,265 acres were planted to maize on European farms on the line of rail—slightly less than in the previous year. Maize from European farms totalling 39,945 tons was sold to the Maize Control Board, while 11,661 tons were retained for consumption on farms. African production for sale in the Maize Control Board areas amounted to 28,922 tons. The price paid for the European crop was £1 15s. per bag of 200 lb. net, delivered at depots on the railway line. African growers received £1 5s. 3d. per bag at all depots including all rural buying depots regardless of distance from the railway line. The difference between the cash price received by African growers and the full price of £1 15s. per bag paid by the Board, was credited to the African Farming Improvement Fund, after rural buying expenses had been deducted.

MAIZE PRODUCTION FOR SALE

(Tons of 2,000 lb.)

Year	European	African	Total
1945	27,300	20,200	47,500
1946	26,800	17,200	44,000
1947	19,000	5,400	24,400
1948	34,300	29,600	63,900
1949	28,272	5,638	33,910
1950	45,082	37,676	82,758
1951	39,945	28,972	68,917

Production fell considerably short of consumption requirements but the shortfall was partly offset by a substantial carry-over from the previous year. A provisional estimate of maize consumption during the year is 84,000 tons. Consumption is increasing rapidly every year.

In the Eastern Province maize production was above average and there was a small surplus over local consumption requirements, which was sold to the Maize Control Board, and transported to the line of rail.

The serious effect of the drought on the water resources available for irrigation was reflected in a further reduction in wheat production. This is clearly brought out in the following table:

WHEAT PRODUCTION FOR SALE

(Tons of 2,000 lb.)

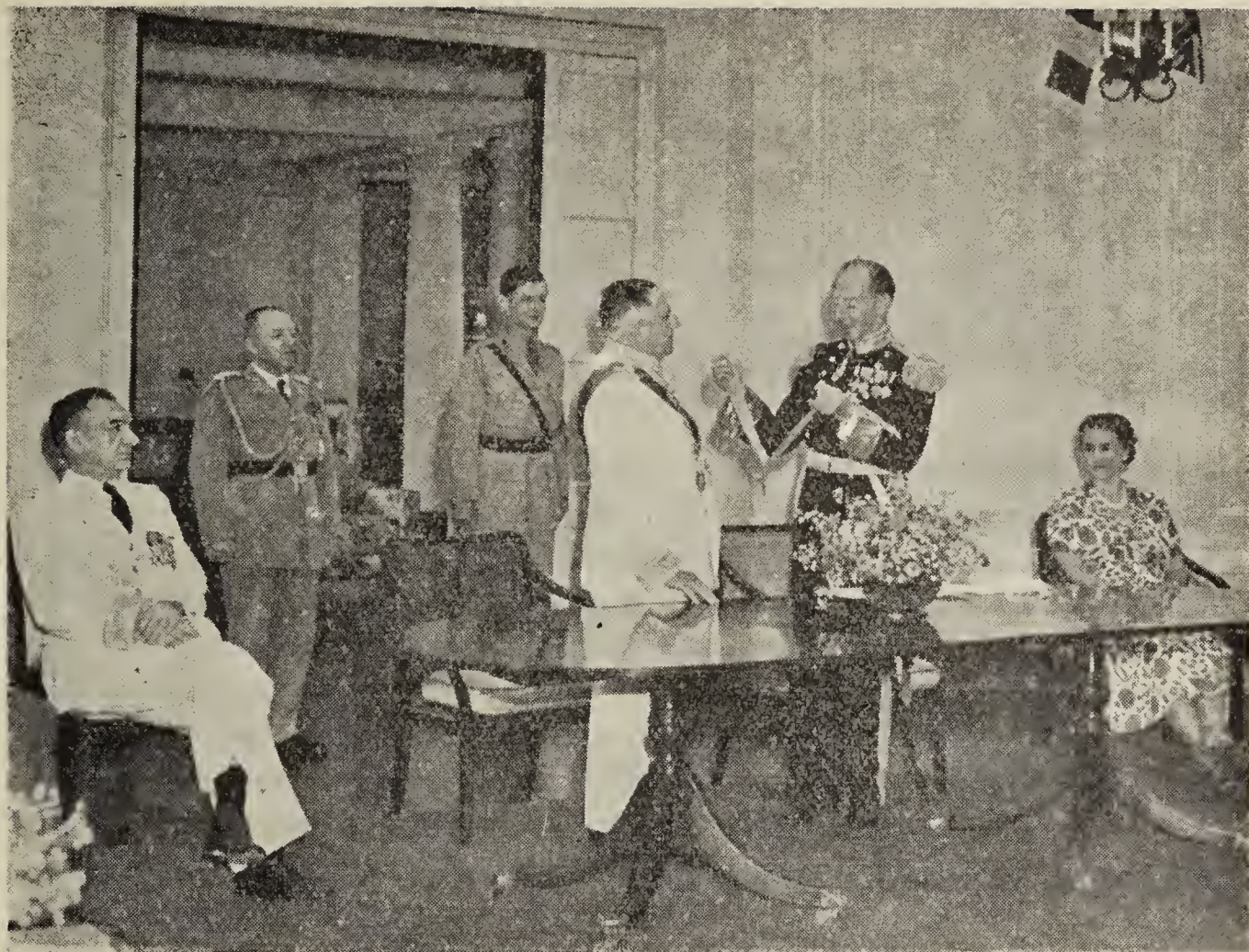
1945	2,550
1946	2,475
1947	500
1948	900
1949	150
1950	325
1951	84

Several things contribute to the lack of interest in wheat on the part of the farmers. For example, wheat under irrigation is relatively more difficult to grow than maize, irrigation work is not liked by the African labourers, and prices for maize and potatoes are relatively more remunerative. The price of wheat was controlled at £2 16s. per 200 lb. net, the same as in the previous year. Consumption of wheat continues to increase rapidly, and 13,434 tons were consumed during 1951, as compared with 11,000 tons in the previous year.

In the native areas there were local shortages of some food crops, but on the whole the Territory managed to survive the drought remarkably well. Cassava came into its own as a famine reserve and fully justified the strenuous efforts that have been made by the Administration in recent years to encourage the cultivation of famine reserve cassava gardens at every village. Rice and ground-nuts were planted on an increased acreage in the native areas, but the serious effect of the drought rather masked the effect since production of these commodities was less than in the previous year.

The first harvest at the Agricultural Department's Pilot Ground-nut Scheme at Mumbwa was considered fairly satisfactory in the circumstances. The target acreage of 400 acres was planted, mainly to the variety Natal Common, and although the general yield worked out at only 500 lb. of kernels per acre, the early plantings of December gave more than 1,000 lb. of kernels per acre. A small herd of ninety-five cattle has been established as part of the Scheme. It has already been observed that one important result of the scheme has been to stimulate an interest in the cultivation of ground-nuts on an increased scale on European farms and in the neighbouring native reserves. The controlled price of ground-nut kernels was £45 per ton (2,000 lb.).

After investigations which have extended over a period of two years, work in connection with a pilot sugar cane plantation began on the north bank of the Zambezi River near Chirundu. £25,000 has been made available for the investigation and up to 350 acres of several varieties of sugar cane will be tested. Observations will be made regarding the irrigation and fertiliser requirements as well as the economics of sugar cane production under local conditions over a period of three years.



M. DE JUNGERS, GOVERNOR-GENERAL OF THE BELGIAN CONGO, RECEIVES THE INSIGNIA OF THE HONORARY K.B.E. FROM SIR GILBERT RENNIE AT GOVERNMENT HOUSE



THE NEW CHIEF KAZEMBE PERFORMS A TRADITIONAL DANCE AFTER HIS INSTALLATION CEREMONY

The attempt made during the past two years to resuscitate cotton growing in the Upper Luangwa Valley suffered a serious set-back due to bad rainfall distribution. Despite a considerable increase in the number of growers, only 33,000 lb. of seed cotton were produced as compared with 31,000 lb. last year. The average yield was only 230 lb. of seed cotton per acre, equivalent to about 70 lb. of lint per acre. Growers received 4*d.* per lb. for clean seed cotton and 2*d.* per lb. for stained.

Considerable expansion in the flue-cured tobacco industry was evidenced during the season when production in the Eastern area rose from 3,214,500 lb. in 1949-50 to 4,413,894 lb. in 1950-51, and in the Western area from 2,956,000 lb. to 6,262,457 lb. The crop grown in the Eastern area was sold over the tobacco auction floors at Fort Jameson and averaged 37.053 pence per lb. Flue-cured tobacco from the Western area was sold over the Salisbury auction floors at an average price of 38.18 pence per lb. The Southern Rhodesia Tobacco Marketing Board in referring to the Northern Rhodesia Western crop in its Annual Report stated that "despite localised drought conditions the quality of the crop showed a great improvement on previous years while the grading and handling were distinctly better". During the first part of the sales season, prices remained attractive to the seller, but from the middle of June onwards there was a severe decline in the prices being paid for low grade leaf and this recession was felt to some extent, but not severely, in the medium grades. One of the primary causes of the decline was the comparatively high proportion of low grade leaf appearing in the Southern and Northern Rhodesian crop as a result of drought conditions in the field.

The production of Burley tobacco declined from 327,100 lb. in 1949-50 to 252,879 lb. in 1950-51. The average price realised was 20.47 pence compared with 26.69 pence the previous season. The crop was sold over the auction floors at Fort Jameson.

The Turkish tobacco industry continued to decline to the very low figure of 49,368 lb. As the crop is sold by private treaty no exact figures are available as to price, but the average was in the neighbourhood of 34 pence.

The progress of the tobacco industry is depicted in the following table:

TOBACCO PRODUCTION

Season	Flue-cured Virginia lb.	Other Virginia lb.	Burley lb.	Turkish lb.	Total lb.
1946/47	3,428,662	82,000	125,000	1,026,500	4,662,162
1947/48	3,769,500	40,000	140,000	585,600	4,535,100
1948/49	5,767,887	40,000	178,767	97,000	6,083,654
1949/50	6,170,500	42,500	327,100	115,000	6,655,100
1950/51	10,676,351	50,000	252,879	49,368	11,028,598

ANIMAL HEALTH AND PRODUCTION

The year 1951 was less favourable to the livestock industry than the previous year, owing to low rainfall and a cold winter, and considerable losses of cattle were suffered in Barotseland. The Barotse people are conservative, and despite the constant advice of Veterinary and Administrative Officers, they are slow to alter their herding customs to meet the needs of a cattle population which has grown rapidly since pleuro-pneumonia was eradicated.

The numbers of cattle sold for slaughter were greater than in the previous year and there was a marked increase in the number of native cattle sold at Government saleyards. The demand for beef outstripped this increase in supply, however, and despite continued importations from Bechuanaland, it was necessary to impose rationing. Prices obtained for slaughter cattle were again increased and compulsory grading was introduced. There were more applicants than in previous years for the Good Cattle Production Bounty. Under this scheme, farmers who employ sound methods of cattle management can claim a bounty of £1 for every yearling they have bred.

A further 2,000 breeding heifers were bought in Southern Rhodesia for distribution to farmers on the line of rail, while to meet the special requirements of the Northern Province, arrangements were made to import 500 breeding heifers from Tanganyika. The Government also purchased a ranch in the Northern Province, in order to breed cattle for distribution in the Province.

Seventy young Boran cattle were purchased from Kenya, and successfully transported to Mazabuka by motor lorry, a journey of almost 2,000 miles.

Dairy production increased under the stimulus provided by higher prices and a bonus paid by Government for good dairying methods, although it is still far from meeting the demand. A new creamery came into operation at Mazabuka.

The standard of animal health was satisfactory. No major epizootic broke out during the year, and anthrax, quarter evil and trypanosomiasis were kept under control. Vaccination against rabies was continued. Tick borne disease remains the stockowners' most dangerous enemy.

FACTORIES

During 1951 there was a further increase in the number of factories in Northern Rhodesia, and by the end of the year 198 were in operation. For the most part factories in Northern Rhodesia consist of small workshops but there were two major developments during 1951. Of these, the most significant was the opening in August of the Chilanga Cement Factory near Lusaka, owned jointly by the Colonial Development Corporation and the Northern Rhodesia Government with a

capital of £2,000,000. This factory is at present equipped to produce 50,000 tons of cement a year and plans are in progress to increase production to 150,000 tons a year. Besides reducing the Territory's dependence on supplies of expensive overseas cement, the opening of this factory can be expected to stimulate production within the Territory of cement products, especially ferro-concrete pipes and poles, and tiles. The other major development was the opening of a brewery established by the South African Breweries, at Ndola.

A further increase in the number of factories can be expected during 1952. In Lusaka alone thirty-five sites have been allotted for industrial development and have, for the most part, been taken up by firms intending to establish factories, mainly small engineering workshops. Northern Rhodesian factories continued largely to serve the local market, although such items as hardwood railway sleepers, plywood, parquet flooring and veneer produced by the Zambesi Saw Mills Limited were exported.

FISHERIES

The fishing industry, although little organised, continues to play its important part in the economy of the rural areas and, particularly in the Bangweulu, Luapula and Mweru regions, and certain sections of the Kafue and Zambezi Valleys, provides the African population with a major source of income and food. The venture by Northern Fisheries, Limited, on Lake Tanganyika continued to operate in spite of considerable difficulties and elsewhere some progress in organisation of the industry has been made under the aegis of African Co-operative Societies.

A committee headed by Dr. S. H. Skaife, lately Chairman of the Fisheries Corporation of South Africa, made recommendations for the development and management of the Territory's fisheries, and as a result Government is now considering the establishment of a Fisheries Development Board to sponsor the industry which, it is computed, may eventually become worth as much as £1,000,000 a year. The scientific and conservation aspects of the fisheries are already making good progress under the Fisheries Branch of the Game and Tsetse Control Department.

The Joint Fisheries Research Organisation, controlled and contributed to by Northern Rhodesia and Nyasaland and assisted by a Colonial Development and Welfare Research grant, made a start under a temporary Director, and two of the scientific staff have arrived. Building has been delayed, but it is hoped that all necessary facilities for the main laboratory and staff housing will be provided during 1952.

Considerable public interest has been shown in the prospects of fish-farming, and with the arrival of a Fish Culturist to take charge, it is expected that this promising method of supplementing protein

supplies and creating a minor industry for the Territory will soon take practical shape.

FORESTRY

Continued progress was made by the Department towards the attainment of its three immediate objectives. The first is to guide the extensive cutting of wood for industry in such a way that it does the least damage to the rather scanty resources of the Territory. A considerable advance was made in this direction during 1951, and all industrial cutting is now satisfactorily under control. The Department's next duty is to select and establish sufficient forest reserves to meet the Territory's needs. The area of gazetted forest reserves in Northern Rhodesia is small but the creation of large reserves and protected forest areas was under investigation at the end of the year. There was some progress in the Department's third duty—to regenerate and plant for the future, but regeneration still lagged behind the rate of cut.

There was a continued shortage in supplies of coal for the copper mining industry and nearly a million tons of wood fuel were consumed by the mines during the year. A total of 29,000 acres of woodlands were felled for this purpose. At the same time about one and a half million cubic feet of saw-logs were cut to provide timbering for the mines. The woodland forests near the mines are now almost exhausted and during the dry season a forest survey unit of the Department reconnoitred, measured and mapped a source for fresh supplies to the west of the Copperbelt. This unit found enough timber to supply the Copperbelt for fifteen years.

The Zambesi Saw Mills, which consumes two million cubic feet of Rhodesian teak (*Baikiaea plurijuga*) every year, lost most of their older machinery in a fire at their Livingstone Mill. This hastened plans, already well advanced, for reducing the production of railway sleepers and mining timbers from this fine wood, and for increasing the production of joinery and flooring. Shipments of Rhodesian Teak flooring were made to the United Kingdom, but South Africa still remained the principal market.

The development of plantations proceeded more slowly than was hoped, as a result of staff and labour shortages and due to delays in the programme of clearing land for planting. The main cause of delay, however, arose from difficulties encountered in building, and in installing the water supplies which tree nurseries require in Northern Rhodesia's dry climate. At Chichele plantation on the Copperbelt, all building was completed and the planting programme progressed satisfactorily. At Broken Hill, workshops, offices and housing for labour and staff were almost completed and planting work was started.

Canadian softwood timber continued to be imported from Canada in rather larger quantities and at higher prices than formerly. Total wood imports during the year were in the neighbourhood of £1,000,000.

MINING

There was a substantial increase in the quantity of copper produced during 1951, as compared with the previous year, despite curtailment of output caused by the continued shortage of coal. The total value of all mineral production was £72,277,038, an increase of $46\frac{1}{2}$ per cent. over 1950. This increase was partly due to the greater output of copper, and partly to much higher average prices realised for copper, lead and zinc.

The total value of minerals produced in the Territory up to the 31st December, 1951, was, subject to final adjustment, £369,243,507.

All the mineral production except the tin concentrates, beryl, mica and phyllite, and some of the gold and limestone was by five large companies. No gold, silver, cobalt or selenium mining company operated as such but these metals were recovered as by-products from one of the copper mines. The manganese ore and silica rock were used by the producers for metallurgical purposes, and the copper concentrates were purchased locally for a similar purpose; some of the lead was used by the producer for de-basing zinc, some of it was fabricated by him into pipes and sheets for use at the mine and at some of the copper mines; a little of it, and an insignificant proportion of the cobalt, copper and zinc, was sold within the Territory, and, in the case of copper, consumed by the producer; some lime was exported but most of the limestone was used as a flux in copper smelting, and, together with all the phyllite, for manufacturing cement. Otherwise the minerals produced were exported to various parts of the world.

The weight and value of the minerals produced during the year were as follows:

Mineral	Weight	Value £
Gold	855 oz.	10,597
Silver	100,388 oz.	31,080
Cobalt alloy (38.08 per cent. Co)	36,726 cwt.	1,387,682
Copper (blister)	205,996 tons	41,166,736
Copper (concentrates 20.11 per cent. Cu)	188 tons	3,777
Copper (electrolytic)	103,146 tons	21,043,257
Copper (other)	18 tons	4,061
Lead	13,970 tons	2,359,104
Manganese ore (41.9 per cent. Mn)	1,260 tons	2,012
Selenium	9,742 lb.	11,081
Tin concentrates (70 per cent. Sn*)	3.89 tons*	2,824*
Vanadium pentoxide	152.91 tons	114,679
Zinc	22,590 tons	6,053,476
Beryl	4.25 tons	319
Limestone	169,016 tons	76,057
Mica	12,734 lb.*	9,306
Phyllite	5,930 tons	741
Silica rock	1,661 tons	249
Total		£72,277,038

*Subject to adjustment.

Chapter 7 : Social Services

EDUCATION

European Education.

European education is provided by twenty-two Government, two Government-aided and seven private schools. Except at Lusaka, where there are separate schools for boys and girls, the Government and Government-aided schools are co-educational. The private schools are all convent schools, intended primarily for girls, but accepting a limited number of small boys.

Of the twenty-two Government schools, two in Lusaka and five in the mine townships offer primary and secondary education up to and including Form IV (Overseas School Certificate) and facilities at these schools will be extended in 1952 to include Form V. Separate infants' schools have also been established in each of the five mine townships. Government schools at Livingstone and Ndola provide education from Kindergarten to Form II and those at four other centres offer education up to Standard 5, the top of the primary range. At four other centres single-teacher schools provide education up to and including Standard 2.

Of the two Government-aided schools, that at Sakeji provides education up to Form II, whilst the one at Kalomo offers a limited range up to Standard 5.

With the exception of the Convent School at Lusaka, which provides education up to Form IV, the range of education at non-Government schools does not proceed beyond Form II.

For pupils who have completed the range offered at the smaller schools and for children living more than three miles from a day school, accommodation is available in the Government hostels at Lusaka, Choma (girls only) and Mazabuka (boys only). Privately managed hostels exist in connection with Government schools at Fort Jameson, Abercorn and Silver Rest. All are centres of widely scattered farming areas.

The Government-aided schools at Sakeji and Kalomo and the convent schools at Lusaka, Broken Hill and Ndola also take boarders.

Tuition is free at Government schools. Hostel fees are charged at the rate of £50 a year but remission of these may be granted in the light of the means and family responsibilities of parents.

Further secondary education for Northern Rhodesian children is mainly obtained in the schools of Southern Rhodesia and the Union of South Africa, the expense to parents being partly met by Government grants and railway concessions. During 1947, Government took the important decision to provide the full range of academic and modern secondary education within the Territory as soon as possible, and this is expected to be available in the Territory from the beginning of 1953.

No university or teacher training facilities exist in Northern Rhodesia, but scholarships, bursaries, grants and loans are available for students who wish to take advantage of such facilities elsewhere. The only adult education provided by Government is through technical classes for apprentices at the five mining and two other centres in the Territory. Commercial subjects are offered at some of the convent schools.

The Department of European Education is also responsible for Coloured and Asiatic education. There is a Coloured school (with hostel) at Fort Jameson and for children who cannot attend there, financial assistance is given to enable them to attend schools outside the Territory. Similar assistance is given to Indian pupils who are unable to attend one of the five small " aided " Indian schools in the Territory.

The following table shows the increase in the number of European scholars enrolled in schools over recent years:

Year			Government Schools	Private Schools	Total
1938	.	.	1,048	200	1,248
1948	.	.	3,147	886	4,033
1949	.	.	3,759	1,052	4,811
1950	.	.	4,748	1,141	5,889
1951	.	.	5,732	1,210	6,942

African Education.

The year has been an eventful one for African Education. It has seen the introduction of a new Education Ordinance; the visit of a group of educational experts from Great Britain; the abolition of compulsory education on the Copperbelt, formerly in force for children in the 12-16 age group; and the virtual completion of the new African Secondary school five miles from Lusaka, which, when in full operation, will provide for some 400 pupils. Linked up with this development of secondary education have been the discussions in Salisbury between representatives of the Governments of Southern Rhodesia, Northern Rhodesia, and Nyasaland relating to the establishment of a Higher College for Africans. Some progress has been made in the preliminary plans for this urgently needed institution.



VICTORIA FALLS CONFERENCE, 1951—THE CONFERENCE ROOM



VICTORIA FALLS CONFERENCE, 1951—THE NORTHERN RHODESIA DELEGATION

The main aim of the new Education Ordinance is to place far more responsibility upon local communities for the administration of the educational system than has hitherto been the case. Local education authorities representative of Government, the Mission Societies, Native Authorities, and recognised African bodies will be established in each administrative district and province and these will be given considerable control both in the spheres of finance and general administration over the schools in their respective areas. By means of these plans it is hoped to bring home certain fundamental facts which, at present, many do not seem to appreciate. One is that education costs a lot of money; another is that since education is expensive and becoming more so every year, any expansion of the educational system in rural areas will have to fall in part directly on the African taxpayer in the form of rates and levies. Another interesting feature of the new Ordinance is that it provides for a Unified Teaching Service under which all teachers approved for entry into the service will be on the same conditions and terms of service irrespective of their employers. This removes a long-standing complaint on the part of the teachers employed by Mission Societies whose conditions of employment have not hitherto been as favourable as those enjoyed by teachers in Government employment.

In September a group of educationists, appointed by the Secretary of State to review educational policy for Africans, visited Northern Rhodesia. The leader of the group was Mr. A. L. Binns, C.B.E., M.C., Chief Education Officer for the Lancashire County Council. Their findings are awaited with great interest.

Compulsory education for children in the Copperbelt and Ndola between the ages of twelve and sixteen years, which had been in force since 1943, was abolished in July, 1951. The ever-growing influx of Africans into this area has caused such pressure upon the available classroom accommodation that the regulations enforcing compulsion could only continue to be enforced if all children under the age of twelve years were removed from school. This would have been a most retrograde step educationally. Under the reorganised scheme for the Copperbelt, available accommodation is reserved for those of the age groups appropriate to each class and the classes themselves are limited to thirty-five children. The results of this policy are already evident in better attendance, better discipline, and better teaching. But satisfactory though these improvements are in themselves, the fact remains that there are estimated to be some 10,000 to 12,000 children on the Copperbelt without educational facilities of any kind.

Besides providing the more formal type of education in this vast mining area the Department has continued to run Community Service Camps for senior boys drawn from Copperbelt schools. These camps are held for two months during the long holidays and their aim is to

instil into the youths a sense of service to the African community and thus, indirectly, to encourage such qualities of character as will make them useful citizens.

Complementary to the character training activities of the Community Camps was the Territorial Conference for over 130 leading teachers, which was held at Lusaka in June. The main purpose of this Conference was to consider practical ways and means of emphasising the vital importance of character training in schools.

The scope of the Department's work is further illustrated by the following facts and figures. Some 146,000 children are attending 1,380 schools which are assisted by Government grants, and the total estimated recurrent expenditure by Government on African education in 1951 was £498,974. Secondary and trades education are playing an ever increasing part in the Department's development programme, but in a young territory such as Northern Rhodesia it is primarily upon the elementary schools that attention has to be focused. In these schools which go up to Standard 2, nearly 90 per cent. of the children are to be found and it is here that social and tribal customs, and difficulties of communications, make the task of ensuring regular attendance so complex. The education of girls and women is another aspect of African education in which no rapid or sensational progress can be reported, but in the last five years there has been an increase of nearly 5,000 girls in school, and more gratifying still, a considerable expansion in the number of girls reaching the higher classes or attending domestic science and homecraft courses.

As part of the general rural development programme for adults the Department has assisted local development teams in the running of special schools for certain Development Areas. At Katete, Namushakende, Fort Rosebery, and Serenje, many different kinds of courses have been held in such subjects as elementary carpentry and building; homecraft; village crafts; agriculture; and mass literacy, and reports so far on the results achieved are very encouraging.

HEALTH

The Health Department, headed by the Director of Medical Services, under the control of the Member for Health and Local Government, continued to expand steadily and the approved establishment of the Department, excluding the Silicosis Medical Bureau, showed an increase in 1951, over the 1950 establishment, of four specialists, three medical officers, one health inspector, one medical inspector, fifteen nursing staff, twelve ward attendants, and one public analyst. The staff of the Silicosis Medical Bureau showed an increase of three—an assistant to the Silicosis Commissioner, and two medical officers.

Six more African urban clinics, three more mining companies' clinics (run in financial conjunction with Government), ten more African rural health centres, and two more mission leprosy settlements (subsidised by Government) were brought into operation during the year.

The following brief notes touch on some interesting aspects of the work of the Department during 1951:

Nutrition.

Planning has progressed on the proposed health and nutrition pilot scheme in the Kawambwa District and a start may be made during 1952. Building is at present in progress.

Yellow Fever.

Departmental investigations comprising further blood surveys have been carried on in Barotseland. Later it is proposed to conduct a research into the epidemiology of Yellow Fever in Barotseland.

Sleeping Sickness.

The Feira campaign has continued and at the end of the year an investigation was started into the trypanosomiasis problem in the Mumbwa District where cases appear to be on the increase. The results of the investigation should be available in 1952 when the action to be taken will be decided.

Venereal Disease.

The venereal disease campaign in the Eastern Province continued throughout the year as did the maintenance and follow-up activities of the residual team working in the Namwala District where the original successful campaign was concluded in 1949.

Tuberculosis.

Work in connection with this disease has continued under the direction of the Chest Physician, assisted during the latter part of the year by a medical officer seconded for the purpose. Much of the work has consisted of surveys of the different races and sections of the population and much valuable information is now becoming available. Investigations have also been carried out with the object of determining the optimum method of vaccination which could be applied to the large and scattered population at risk. The results of this must necessarily be slow owing to the length of time needed to assess results, but the

problem is now showing signs of solution. Therapeutic work amongst all races increased and extra hospital facilities have been made available for cases of this disease. Still further accommodation is planned in connection with two hospitals, the designing of which is now in the hands of the architects.

Leprosy.

The use of the modern sulphone method of treatment has been greatly extended and an additional village settlement, based on a general hospital, was successfully launched. The advent of sulphone treatment has necessitated the re-casting of the general plan for dealing with this disease. Considerable thought is at present being given to the best way in which this can be done.

Eye Diseases.

The Ophthalmic Specialist, as in former years, toured the Territory considerably. His work serves an extremely useful purpose not only from the point of view of the actual cases treated but also by the awakening in the population of a consciousness that much blindness and near-blindness is easily preventable. Propaganda and advice on this subject is constantly in circulation and should, in the years to come, result in considerable benefit to the population as a whole.

Bilharzia.

Increased attention has been paid to the problem of control of this disease which, while not at present a territory-wide menace, might easily become so as conditions apparently favourable to its spread exist in many places. The danger of assisting its spread by the introduction of uncontrolled water conservation and irrigation projects has been fully appreciated. Steps have already been taken to ensure that this danger is avoided, or at least greatly minimised, by the insistence upon suitable precautions and planning being included in such projects from their inception.

Sanitation and Hygiene.

Most of the work in this sphere is carried out in urban and peri-urban areas and is the responsibility of the individual local authorities, assisted by Government funds, and in most instances by Government personnel. The scope of the work continues to extend and its quality to improve. Rural work is carried out through the Native Authorities, some of whom are becoming extremely enlightened in this respect. Government assists by advice and propaganda and by the training and supervision of the necessary staff.

Urban Clinics and Rural Health Centres.

The numbers of both types of institution are continually increasing and they play an extremely important part in the territorial health plan. They all undertake curative work and most of them are provided with beds for in-patients. Most of the urban clinics are staffed by European Welfare sisters and the rural health centres are in charge of qualified African orderlies, supervision in both cases being exercised by medical officers. In addition to their curative work, they also take a very important role in the sphere of prevention. Through such services as Maternity, Child Welfare and Venereal Disease Clinic schemes, they have a wonderful opportunity, of which they take full advantage, of preaching the gospel of prevention of disease.

Training of African Male Staff.

This was continued during the year and it was possible to make a start on the training of African female nurses at Livingstone. Both urban and rural health centres continue to increase their work.

CAUSES OF DEATHS

The following figures give the causes of deaths among Europeans during 1951:

Diseases of the circulatory system . . .	58
Violence	36
Infective and parasite diseases . . .	6
Malaria	11
Blackwater Fever	1
Diseases of the respiratory system . . .	32
Cancer and other tumours	21
Diseases peculiar to the first year of life . . .	34
Diseases of the nervous system	20
Diseases of the digestive system	9

The European birth rate was 32.6 per 1,000 population as compared with 28.8 per 1,000 in 1950 and the figure for the 1951 death rate showed a slight increase from 5.2 to 6.39 per 1,000 population. These figures are based on the figures of the census taken in May, 1951, which gave the European population as 37,221.

SILICOSIS BUREAU

The work of the Silicosis Medical Bureau also continues to expand, and both the total number of persons examined and the total number of examinations carried out increased by over 4,000, while the total number of first certifications of silicosis alone increased by over 50 per

cent. A summary of the work and findings of the Bureau during the year follows:

Total of persons examined	26,884
(Europeans, 3,277; Africans, 23,607)	
Total number of examinations	27,547
(Europeans, 3,361; Africans, 24,186)	
Total examined or re-examined for first engagement	7,749
(Europeans, 865; Africans, 6,884)	
Total accepted	7,265
(Europeans, 759; Africans, 6,506)	
Total rejected	484
(Europeans, 106; Africans, 378)	
Total post mortem examinations	91
(Europeans, 21; Africans, 70)	
Total post mortem examinations at which compen- sable disease was found	8
(Europeans—S. Nil, T. Nil, S. and T. 1)	
(Africans—S. Nil, T. 5, S. and T. 2)	
<i>Note.</i> —Reports are still awaited on 5 European and 15 African cases.	
S = Silicosis. T = Tuberculosis.	
Total first certifications of silicosis alone	44
(Europeans, 8; Africans, 36)	
Total first certifications of tuberculosis alone	24
(Europeans, 3; Africans, 21)	
Total first certifications of silicosis with tuberculosis	3
(Europeans, Nil; Africans, 3)	
Total of all first certifications of compensable disease	71
(Europeans, 11; Africans, 60)	
Persons previously certified who, in 1951, were re- certified as having:	
Advanced stage of silicosis	16
(Europeans, 9; Africans, 7)	
Tuberculosis added to previous silicosis	10
(Europeans, Nil; Africans, 10)	
Silicosis added to previous tuberculosis	Nil
Total certifications of advance or complication	26
(Europeans, 9; Africans, 17)	

SOCIAL WELFARE

The welfare staff was concerned primarily with work amongst Europeans. On the Copperbelt, however, a twelve months' training course was started under the supervision of the male welfare officer for African welfare staff employed by local authorities. Fifteen persons, including one woman, from urban centres are attending the course.

A permanent home (St. Michael's Home) for European children in need of care was established at Ndola in a private house standing in some fifteen acres of grounds, which was bought by Government for the purpose. The home, which can accommodate up to fifteen children of both sexes is fully maintained by Government, but it is managed by the Diocese of Northern Rhodesia on Government's behalf.

The Emergency Children's Home, also at Ndola, which had been operated by the Salvation Army on Government's behalf ever since it was opened in 1950, was used to capacity. Towards the end of the year the Salvation Army handed over the management of the home to Government.

Plans are being prepared for rebuilding the Aged Men's Home and Social Centre at Ndola. This centre, as well as providing permanent residence for old men, has accommodation for casual destitutes. Preparations have been made by the Federation of Women's Institutes to build a block of flats for aged women at Ndola. Government has made a capital grant towards this project. Government Welfare Officers have continued to use Homes in Southern Rhodesia and the Union of South Africa for children in need of care. In addition to the usual fees, the Government of Northern Rhodesia made capital grants to two Homes in Southern Rhodesia who receive children from this Territory.

Through the appointment of additional welfare officers, it was possible to provide more assistance in the way of enquiries into applications for Old Age and Compassionate Allowances which are met from Government funds.

African students who have been receiving training in Social Science in the Union of South Africa from scholarships granted by the Government of Northern Rhodesia, are being employed by some local authorities. They are concerned principally in community and group activities, but they are undertaking also some probation work. One local authority maintains a training scheme for their African welfare staff. Two local authority welfare officers (one European and one African) proceeded to the United States of America during the year to take courses provided under the United Nations Scholarship Scheme.

In several centres classes in housewifery and kindred subjects are developing for African women, and efforts are being made to train some of these women to teach the subjects themselves.

The mining companies make extensive provision for the social and recreational activities of their employees. At one centre a boys' club for Africans and another for Europeans are being run on a voluntary basis.



MR. JAMES GRIFFITHS VISITS THE GAME PARK AT LIVINGSTONE

Chapter 8 : Legislation

The majority of the fifty-four Ordinances enacted during 1951 were amendments of existing legislation, and none of these made any change in its substantial principles. The most important Ordinances embracing fresh legislation covered a wide variety of subjects.

The Northern Rhodesia Cadet Corps Ordinance, 1951, provides for establishment of a Cadet Corps with "the object to provide moral, mental and physical training through the medium of military instruction". It applies to all boys over the age of twelve who are suitable for service in the Corps and who are attending schools where there are contingents. The Governor is empowered to direct the establishment of a contingent of the Corps in any school where there are not less than forty eligible boys. No boy who is physically unfit shall be required to serve and there is provision for exemption at the request of parents.

The provisions of the Crown Proceedings Act, 1947, of the United Kingdom are followed closely in the Crown Proceedings Ordinance, 1951. Broadly, this Ordinance makes the liability of the Crown in respect of Civil wrongs the same as that of a private citizen.

The Victoria Falls Power Ordinance, 1951, provides for the establishment of a statutory Board to administer the Victoria Falls Hydro-Electric Power Undertaking, purchased by Government in 1949.

The usual statutory requirements of registration by aliens, who are defined as "any person who is neither a citizen of the United Kingdom and Colonies, nor of any country in the British Commonwealth of Nations, nor a British Protected person, nor a citizen of the Republic of Ireland", is provided for in the Registration of Aliens Ordinance, 1951.

The Pensions (Increase) Ordinance, 1951, gives financial relief to Government pensioners. Provision is made for an increase of five per cent. on all European pensions and, in addition, an increase of twelve and a half per cent. on European pensions payable before the 1st January, 1946, both subject to certain maxima. There are also substantial and similar increases in African pensions.

A River Transport Board of Control, whose general duty is to provide for an efficient and adequate system of public transport for goods and passengers by road and on the Zambezi River, or, in an emergency, by air, between Livingstone and Barotseland, is established

by the Zambezi River Transport Service Ordinance, 1951. The Board of Control is empowered to acquire the Zambezi River Transport Service and operate it as a body corporate.

The African Education Ordinance, 1951, repeals and replaces a previous Ordinance of the same title and makes provision for a greatly improved educational system for Africans. The new Ordinance delegates more responsibility to local education authorities and creates a unified African teaching service. The Director of African Education will continue to control the educational system, advised as formerly, by an Advisory Board. For each province, district and such special areas as the Governor may decide, there are to be Local Education Authorities, with responsibilities for African Education in their areas. The Director is empowered to make grants to the Local Education Authorities from the public revenue to be used for educational purposes in schools approved by him. All African teachers approved for appointments in schools maintained from public funds must belong to the Unified African teaching service, and every teacher in charge of a school must be in possession of a prescribed certificate or licence.

The Income Tax (Amendment) Ordinance, 1951, gives substantial relief to the taxpayer by providing for an increase of the marriage allowance from £500 to £750 and the single allowance from £250 to £350, an increase of dependants' allowance from £100 to £150, but limited to the difference between the dependant's income and £300. New scales are created for the purpose of modifying the former disparity between the married and single taxpayer and these scales, whilst ensuring that some relief is given to all taxpayers by the increased allowances, limit the amount of relief to be given to those in the higher income groups. Income received in Northern Rhodesia from outside the Territory is now not subject to tax. There are also further reliefs relating to deduction of debenture interest, allowances for wear and tear, replacements and renewals and capital redemption. This Ordinance comes into force on the 1st April, 1952.

Chapter 9 : Justice, Police and Prisons

The courts administering justice are the High Court, the Subordinate Courts, and the Native Courts. The High Court consists of a Chief Justice and a Puisne Judge, and, within the limitations of the High Court Ordinance, has the jurisdiction and powers of the High Court of Justice in England. The High Court Buildings, including the High Court Registry, are at Livingstone, which is still the judicial headquarters of the Territory. The Puisne Judge is stationed at Ndola, where there is also a District Registry, to facilitate the administration of judicial work on the Copperbelt. In addition to Livingstone and Ndola, High Court Sessions are held periodically at Lusaka, Kasama, Fort Jameson and Mongu, and occasionally at various district headquarters on special circuit. Under the Mental Disorders Ordinance enacted in 1949 but not yet in force, there has been vested in the High Court jurisdiction to administer and control the estates and property of patients under that Ordinance; and the Registrar of the High Court is to exercise the powers of the Master in Lunacy or of the Court of Protection in England. The Registrar of the High Court is also the Registrar of Companies, Registrar of Patents and Trade Marks, Registrar-General of Births, Deaths and Marriages, and Sheriff of the Territory.

Subordinate to the High Court are the Magistrates' Courts created by the Subordinate Courts Ordinance. These are of four classes: Class I Courts being those of the Provincial Commissioners and Resident Magistrates, Class II Courts those of the District Commissioners, Class III Courts those of District Officers not in charge of a district, and Class IV those of such cadets in the Provincial Administration as are given judicial powers. At present there are Resident Magistrates at Ndola (two), Livingstone, Lusaka, Kitwe and Broken Hill. All these Subordinate Courts exercise criminal jurisdiction; Class I and II Courts can try all criminal offences, though they require the High Court's permission to try treason or murder; Class III and IV Courts have restricted jurisdiction. All criminal cases tried by Subordinate Courts are liable to review by the High Court; and there is a limit, varying according to the class of the court, to the sentence which can be imposed without the confirmation of the High Court being required. Subordinate Courts, except Class IV Courts, have civil jurisdiction, limited according to the amount involved. Appeals, both civil and criminal, lie from the Subordinate Courts Class I and II to the High Court, and from the lower Subordinate Courts to the Provincial Commissioners' Courts.

The Native Courts are set up under the Native Courts Ordinance (for all the Territory except Barotseland) and the Barotse Native Courts Ordinance (for Barotseland). The Courts are constituted in accordance with the native law and custom of the area in which the particular Court is to have jurisdiction, and recognised under the Ordinances by warrant of the Governor, or of a Provincial Commissioner with the Governor's consent. The powers and jurisdiction of the Court are normally set out in its warrant. Native Courts of Appeal may also be recognised. Except in Barotseland, in areas where there is a Native Court of Appeal, appeals from the Native Courts of first instance lie to that Court, and from that to the local District Commissioner's Court. Where there is no Native Court of Appeal they lie to the local District Officer's Court, if any, otherwise to the District Commissioner's Court. There are further rights of appeal, from the District Officer's Court to the Provincial Commissioner's Court and from the District Commissioner's Court or Provincial Commissioner's Court to the High Court. In Barotseland, appeals lie to one or more Native Courts of Appeal, and thence to the Provincial Commissioner's Court in criminal cases and to the High Court in civil cases ; if there is no Native Court of Appeal they lie direct to those Courts.

Southern Rhodesia, Northern Rhodesia and Nyasaland have established a joint Court of Appeal, known as the Rhodesia and Nyasaland Court of Appeal. Appeals, both civil and criminal, lie from the High Court of the Territory to this Court of Appeal, though in many cases leave of the Court is required for the appeal. The Rhodesia and Nyasaland Court of Appeal meets six times a year, in Salisbury, Bulawayo, Livingstone or Blantyre. In the case of civil appeals from Northern Rhodesia to the Rhodesia and Nyasaland Court of Appeal a further appeal lies to the Privy Council, either of right or with leave of the Court of Appeal. There is no corresponding provision for criminal appeals to the Privy Council, but a petition may always be presented to the King in Council for special leave to appeal.

The law administered in the High Court and Subordinate Courts is basically English law, being the common law, statute law and doctrines of equity in force in England on the 17th August, 1911 (where not at variance with subsequent enactments), together with such later English statutes as have been applied to the Territory, certain Orders in Council and the Northern Rhodesia Proclamations and Ordinances. Practice and procedure are governed by the Criminal Procedure Code in criminal cases, and by the High Court and Subordinate Court Rules in civil cases ; but subject to these the High Court and Subordinate Courts observe the practice and procedure for the time being in force in, respectively, the English High Court of Justice, and the English County Courts or Courts of Summary Jurisdiction. In cases in the High Court and Subordinate Courts where natives are involved,

and in all Native Courts, native customary law is followed where it is not repugnant to justice or equity and not incompatible with local enactments.

POLICE

The authorised establishment of the Northern Rhodesia Police Force in 1951 was 250 European police officers and 1,720 African policemen. The establishment also included forty-two European and seventy-four African civilian employees. European officers comprised forty-eight superior rank, and 202 inspectors and assistant inspectors. The standard of literacy among African constables is improving steadily and at the end of 1951 a total of 1,041 men had passed the Government Standard IV examination in English, and of this number 238 had passed higher examinations. African constables can rise to the rank of African Inspector.

The Headquarters of the Force is at Lusaka, although the headquarters of the Immigration branch remains at Livingstone, where there is also the Police Training Depot. It is proposed, however, to move the Training Depot to a site near Lusaka. Work on the new Depot was started in 1950 and fair progress has been achieved. There are thirty-six police stations and posts in the Territory, the majority being in line-of-rail Districts. Off the line-of-rail there are thirteen stations and four smaller posts. In addition to the usual branches, including a successful band, the Force maintains a Mobile Unit. This is a self-contained and completely mobile body whose primary purpose is to provide a reserve from which reinforcements can be drawn should the need arise in any part of the Territory.

The Northern Rhodesia Police Reserve was established in December, 1950. The Chief Commandant is a Senior Superintendent of Police with headquarters at Ndola. The Reserve is a volunteer organisation with an authorised establishment of 1,450 Europeans and 928 Africans. It corresponds to the organisation of the regular police force and may be employed in the Territory for assisting the regular Force. For purposes of administration, the Territory is divided into four Police Reserve divisions with a Divisional Commandant in charge of each. Each division is sub-divided into districts under the command of a District Commandant. There are 20 Reserve formations distributed throughout the Territory.

The increasing industrialisation of the Territory and the subsequent growth of population in urban areas have been followed by a progressive increase in recent years in the number of cases handled by the police, as the following comparative tables show:

Year	Penal Code Offences	Statutory Offences	Total All Cases
1945 . .	5,378	10,408	15,786
1946 . .	6,109	14,207	20,316
1947 . .	7,113	19,240	26,353
1948 . .	7,969	20,070	28,039
1949 . .	10,655	19,202	29,857
1950 . .	12,411	22,502	34,913
1951 . .	13,369	21,780	35,149

During the year 26,269 persons were convicted in cases brought by the police. This figure represents a decrease of 463 over the 1950 total.

PRISONS SERVICE

The Prisons Service is under the control of the Commissioner of Prisons with headquarters at Livingstone. In 1951 it had an authorised establishment of a Deputy Commissioner, six Prison Superintendents, eleven Chief Prison Officers, three Clerks, a Technical Instructor, 479 African Warders, eighteen African Clerks and thirty-eight Industrial Instructors and Drivers. In addition, an Inspector of Works and three Building Foremen were included on secondment from the Public Works Department.

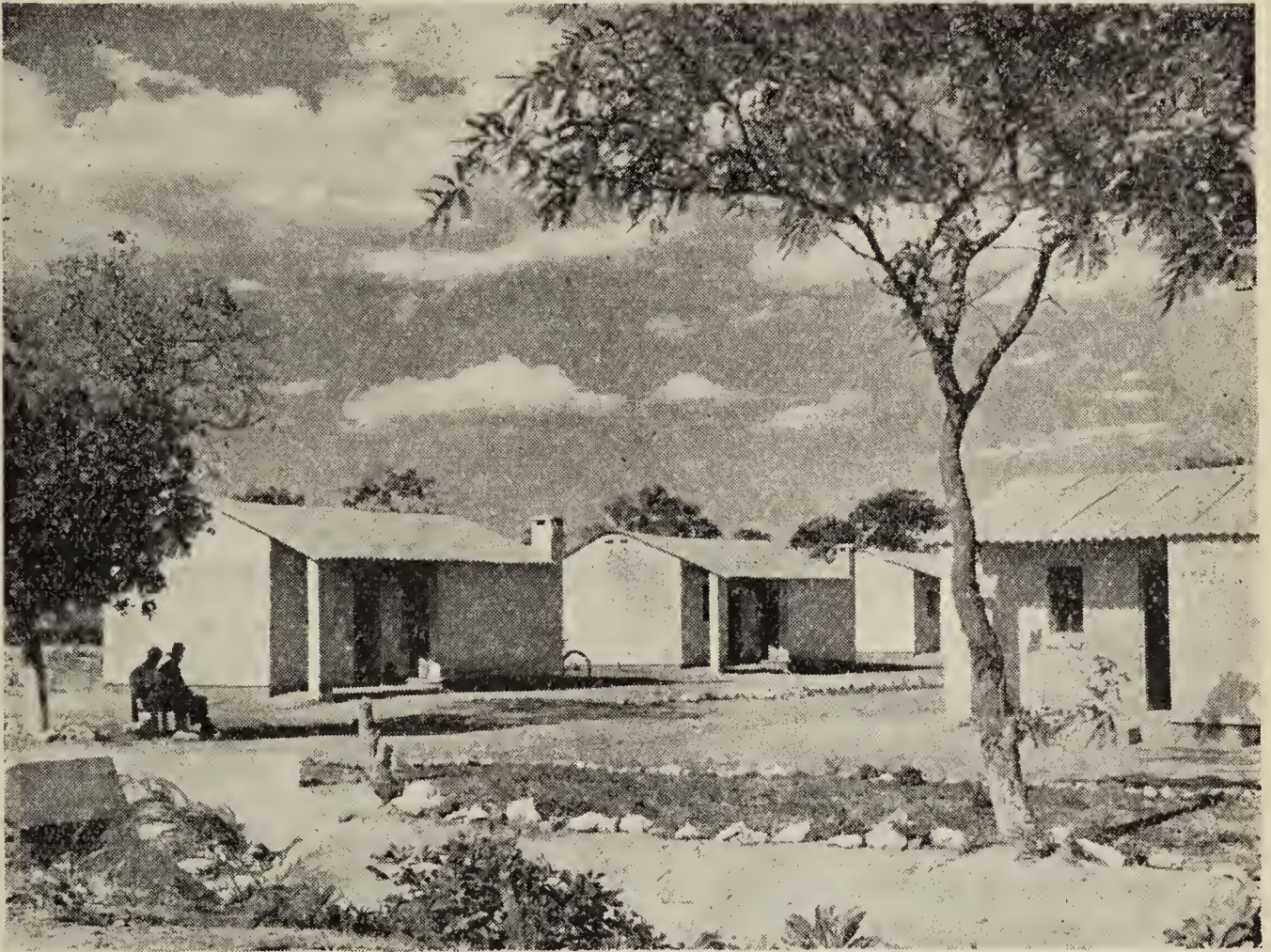
There are thirty-nine prisons in the Territory, of which seven are controlled by European Prison Officers, six by Police Officers and the remainder by the Provincial Administration. All prisons controlled by Prison Officers and five of those controlled by Police Officers are staffed by African Warders, the remaining one being staffed by District Messengers and African ranks of the Police Force. Prisons controlled by the Provincial Administration are staffed by African District Messengers.

Camps for first offenders are situated at the prisons under the control of the European prison officers, which allows for a wider classification of prisoners. All prisoners with sentences of over six months are transferred to central prisons, while long-term European prisoners are usually transferred to Salisbury in Southern Rhodesia (by arrangement with the Southern Rhodesia Government) to serve their sentences. At the central prisons selected prisoners are instructed in various trades under skilled supervision. These include carpentry, tailoring, shoe-repairing, brick-making, bricklaying, thatching and agriculture. The Prisoners' Aid Society, controlled by an Executive Committee, operates throughout the Territory and apart from interesting itself in the welfare of prisoners, endeavours to find employment for discharged persons.

A comprehensive development plan has been submitted to Government for the re-siting and rebuilding of all central prisons outside the main townships and it is hoped that work will commence

on these projects during 1952. At the same time reorganisation proposals have been accepted in principle by Government. This will necessitate amendments to the Prisons Ordinance, which it is intended shall be submitted to the Legislature during 1952.

A new Juveniles Ordinance has been drafted and will be placed before the Legislature in due course. It is hoped that an institution run on Borstal lines will be started at Katombora, approximately thirty-five miles from Livingstone. Against the establishment of such an institution, a camp for juvenile offenders has been opened at Katombora, where some twenty African juveniles are detained.



AFRICAN HOUSING AT CHILANGA



THE NORTHERN RHODESIA POLICE BAND

Chapter 10 : Public Utilities and Public Works

In the main towns of the Territory, the supply of electricity and water is either in the hands of the municipality (as at Ndola and Livingstone), the mining companies (as on the Copperbelt towns and at Broken Hill), or the Government (as at Lusaka). Smaller townships rely on boreholes for water supply and have individually owned lighting plants at hotels, hospitals, railway stations, etc.

The supply of electricity and water, except in the mining towns, has begun to fall short of requirements owing to increased population and new industrial developments since the war, and to the difficulty of obtaining new plant for the water and electricity undertakings. In the mining towns, green lawns and attractive flower gardens all the year round are possible because of unlimited water pumped out of the mines, and lighting is an almost negligible drain upon power supplies which have to provide enormous industrial current. In the mine townships electricity and water are provided free; in the adjacent Government townships which the mines supply, standard charges are made.

On the Copperbelt electricity is generated from steam turbines. Broken Hill is supplied by hydro-electric power stations from the Mulungushi Falls and the Lunsemfwa River. Livingstone has harnessed water from the Zambezi led by canal to one of the great Zambezi gorges. Steam and diesel engines produce Lusaka's electricity.

The continued abnormally swift growth of Lusaka has strained the capacity of the power station to its utmost. New generating plant, with an output of two-thirds of the present installed total capacity of the station, was in an advanced stage of installation at the end of the year. An additional large borehole was completed and substantially augmented the town's water supply. A programme to increase the electrical generating and water pumping capacity still further is being actively pressed.

AERODROMES

The main runway at Lusaka Aerodrome was improved to make it capable of acting as a diversionary landing ground for aircraft of the Hermes class using the new Livingstone Aerodrome. Investigations were completed in the improvement of Ndola Aerodrome to a similar standard, and work will be started in 1952.

Construction at Mongu and Fort Rosebery was continued and improvements were made to Choma and various other airfields.

BUILDINGS

General.

The rapid development of the Territory necessitated a large expansion in the Buildings branch of the Public Works Department and its work was divided into various sections, each dealing with a separate building programme. Building costs continued to rise, owing both to the increase in price of imported materials and manufactured articles, and to the rise in the cost of labour.

Labour.

The supply of skilled workmen was barely adequate to maintain satisfactory progress and there was a definite shortage of unskilled labour, which resulted in schemes being delayed.

Materials.

The supply of materials was generally better in 1951 and cement was plentiful after June. However, roofing materials became very scarce during the second half of the year and are likely to remain in short supply. The petrol ration was cut after the 1st September and this adversely affected all work.

Housing.

During the year 245 units of accommodation were completed. The term "units of accommodation" is used because it includes houses, flats and rooms in hostels. New types of standard houses for Government servants were designed and drawings prepared for hostels in various centres. The approximate expenditure during the year on this programme was £537,000.

Police, Prisons and Military.

On the Copperbelt one Mine Compound Police Camp was completed, one was well in hand and work started on three others. Elsewhere work progressed on three police stations and on increasing the African housing at two more centres. The approximate expenditure during the year on this programme was £126,250. The Commissioner of Prisons controls all prison building work, with technical advice from the Public Works Department. There was no major military construction programme but barracks were maintained, and minor improvements made. The approximate expenditure during the year on this work was £5,200.

Health.

The new hospital at Broken Hill approached completion and work on hospitals at Choma and Balovale progressed. Extensions were made

to Lusaka, Fort Jameson and Livingstone hospitals. Designs were completed for Cottage hospitals at Choma and Mazabuka and plans were made for new hospitals at Livingstone and Kitwe and for a Central Medical Store at Lusaka. The approximate expenditure during the year on this programme was £273,450.

Education.

The large annual increase in the population created a serious problem in providing adequate educational facilities, and prefabricated buildings were extensively used. Buildings of asbestos/cement and steel construction were completed at various centres, providing a total of forty-three classrooms. Orders were placed with the manufacturers of prefabricated units for a further twenty-two classrooms for four schools. Infants' schools in permanent construction were completed at various centres, providing a total accommodation of thirty-six classrooms. Drawings are in preparation for extensions, in permanent construction, to Infants' schools in other parts of the Territory and additional accommodation of twenty-seven classrooms will be provided. Indian schools were completed at Fort Jameson and Mazabuka, and a Eurafrican school was extended at Fort Jameson. Tenders were invited for two Secondary Schools at Lusaka. The approximate expenditure during the year on this programme was £107,400.

General.

Numerous buildings were erected for various departments. The major items under this heading were large administrative offices at Ndola, a new Public Works Department headquarters at Lusaka and a Stores Department Depot at Ndola. Designs were prepared for the main Stores Department Depot at Lusaka. The approximate expenditure during the year on this programme was £170,750.

WATER DEVELOPMENT AND IRRIGATION DEPARTMENT

The work undertaken by the Department in 1951 in constructing dams, wells, weir and boreholes, and in water conservation and hydraulic undertakings generally, was placed upon a firmer basis by the continued acquisition of technically trained staff.

Brigadier C. G. Hawes, C.I.E., M.C., M.I.C.E., Hydrological Adviser to the Government of Uganda, carried out an investigation into the work of the Department and made recommendations regarding its organisation, which are now being implemented as far as difficulties in recruitment and housing allow. Brigadier Hawes also investigated the possibilities of developing hydro-electric power on the Kafue River and of irrigating the Kafue Flats, and preliminary work has been begun on the lines recommended by him. One of the eight discharge stations

recommended by him on the Kafue River has been established and daily discharge measurements are taken. Other discharge stations are being established as staff becomes available to man them. Five of the eight recommended gauging stations have been set up and daily water levels are being recorded at these stations.

Normal departmental work has shown a considerable expansion. The Hydrological section is steadily accumulating data on the flow of rivers and streams, and of rainfall, evaporation and run-off. As far as possible foremen are being trained to perform non-scientific tasks of this nature, in order to allow better use to be made of the limited number of technically trained staff.

During the year, 148 boreholes were drilled, at a cost of £27,000 and they have yielded an average 3,400 gallons a day each. Wherever possible, geophysical staff investigated the possibility of obtaining water before drilling began, and in 70 per cent. of their selections, water was found. In fifty-five cases, the holes drilled were on Government sites and in ninety-three cases, the work was done on private land. Exploratory boreholes were also constructed in the local fissured limestone, in connection with the water supply of Lusaka. Much greater use of mechanical earth-moving equipment was made than in the previous year and the work done by these machines proved especially valuable at times of the year when labour supplies were short. Maintenance facilities and supplies of spare parts have improved. These earth-moving units have been employed on the construction of earth-filled puddle-core dams, and thirty-five large dams of this type have been constructed during 1951.

Small earth dam construction in European farming areas is now undertaken by the Soil Conservation Service, and in the African Rural Areas, the Native Authorities are being encouraged to build their own small dams on the advice and under the supervision of the Water Development and Irrigation Department. Native Authorities constructed fourteen such dams during 1951.

AFRICAN HOUSING

The Commissioner for Local Government is the officer responsible for the administrative duties in connection with African Housing in the local government areas. Under the Territory's Development Plan the sum of £1,500,000 was provided to build houses for Africans in towns and at District stations. The whole of this sum is being spent on permanent brick cottage-type houses and by the end of 1951 6,431 houses had been completed and 2,791 were in the course of construction. Of the completed houses, 4,860 were handed over to local authorities for letting to the public and the balance was retained by Government for housing its own African civil servants. The houses

handed over to local authorities for letting to the public are against loans carrying interest of $3\frac{1}{2}$ per cent. and repayable over forty years.

Under the Territory's Revised Development Plan the further sum of £2,850,000 has been provided for African housing and it is proposed to continue the existing programme and build a further 8,600 houses. It is the aim to encourage the emergence of a stabilised African community in towns, living a family life in neighbourhood units with adequate public service.

BUILDING AUTHORITY

The demand for all types of building continued to increase throughout the year. Supplies of cement improved in the latter part of the year, but other items especially iron and steel and roofing materials remained in very short supply and building costs continued to rise. The Construction of Buildings (Temporary Control) Ordinance was re-enacted for 1951.

The highest priority in the issue of permits continued to be given to residences, while factories, storage buildings and offices were given priority over retail premises.

A comparison of the value of building undertakings over the four years of control is shown in the following schedule:

Year	Total Value of Applications Approved	Residences	Commercial and Industrial	African Housing
	£	£	£	£
1948 .	2,672,926	1,964,435	708,491	—
1949 .	2,897,943	1,917,447	866,232	114,264
1950 .	3,111,875	2,010,754	939,382	161,739
1951 .	5,344,098	3,408,296	1,664,292	271,510

These figures do not cover building by Government, Mines and Local Authorities, all of whom carried out extensive schemes for African housing.

A table showing the permits issued up to the 31st December, 1951, is at Appendix VI.

TELECOMMUNICATIONS

Telephone Exchanges

New Post Office exchanges were brought into service at Chingola and Mufulira and the cable distribution completed for the new exchange to be installed at Luanshya. Extensions were made to the exchanges at

Livingstone, Lusaka and Ndola, and additional subscribers connected at other centres. Additional telephone distribution cables were laid at Broken Hill, Chingola, Choma, Kitwe, Livingstone, Luanshya, Lusaka, Mazabuka and Ndola, while preparations were made for the conversion of the manual exchanges at Choma and Mazabuka to automatic working.

Farm Lines

Additional subscribers were connected to the Chisekesi, Mufulira and Pemba systems, and construction of additional lines commenced at Broken Hill, Chingola, Chisamba, Choma, Kalomo, Kitwe, Lusaka, Mazabuka and Ndola.

Trunk Routes

Two new three-channel systems were introduced on the main telephone trunk route between Livingstone and Lusaka, and between Lusaka and Ndola, and a direct trunk was brought into operation between Livingstone and Kalomo.

Telegraphs

Wireless telegraph communication was established with Kalabo, Luwingu and Nakonde bringing the total number of wireless stations in the Territory to thirty-seven.

COMPARATIVE STATEMENTS

Telegrams

	1950	1951
Forwarded . . .	299,704	345,466
Received . . .	300,023	370,652
Transmitted . . .	479,893	487,389
Totals . . .	1,079,620	1,203,507

Telephone Trunk Calls

	1950	1951
Internal . . .	391,503	465,510
External		
Outgoing . . .	26,509	39,312
Incoming . . .	18,189 44,698	22,577 61,889
Totals . . .	436,201	527,399

Chapter 11 : Communications

ROADS

Work on the large development programme, which was started under the Development Plan in 1949, was continued during the year and four firms of contractors and three Departmental construction teams were engaged on the improvement to Class I (bitumen surface) of nine sections of road, amounting to 294 miles in all. The total value of this work when completed will be about £1,350,000. The total length of Class I roads open to traffic at the end of 1951 amounted to 175 miles. In addition, improvement was also carried out by contract to the Livingstone-Mambova road (47.5 miles) which has now been completed to Class II (gravel surface) standard. Work was also continued departmentally on the improvement of existing roads to Class III (improved earth surface) standard.

The replacement of timber bridges with bridges of permanent materials was continued on the Great North Road while elsewhere surveys and designs were prepared for further bridge work.

The survey of the Great North Road from Broken Hill to Tunduma (560 miles) was undertaken as a matter of urgency in connection with the improvement of this road to Class II standard and was well advanced by the end of the year. The improvement of this road was rendered possible by a grant of £500,000 from the Economic Co-operation Administration. Surveys and contract documents for the improvement of a further 200 miles of road to Class I standard were also completed during the year.

The estimated expenditure incurred in road construction and maintenance during 1951 was £790,300.

CIVIL AVIATION

The *Air Pilot of Northern Rhodesia* (1951 edition) together with the *Air Law* (1951 edition) provide detailed information on aviation in Northern Rhodesia.

One international and three national airports, lying along the north-south corridor route throughout the Territory, provide customs, health and immigration controls as well as fuel, air traffic control, radio and radio navigation aids. In all, forty-two airfields are maintained, of which fourteen are constructed for use in all weathers.



NORTHERN RHODESIA STAND AT THE 1952 BRITISH INDUSTRIES FAIR



LIONESS PHOTOGRAPHED IN THE KAFUE NATIONAL PARK

Central African Airways provide both regional and internal scheduled services with a fleet of aircraft consisting of seven Vikings, five Doves and four Beavers. They operate routes as follows:

(a) *Internal:*

- (i) Lusaka, Fort Jameson—twice weekly each way (with additional weekly excursions to Monkey Bay in Nyasaland)—operated by Viking aircraft.
- (ii) Lusaka, Livingstone—four times weekly each way—operated by Viking aircraft.
- (iii) Lusaka, Mankoya, Mongu, Balovale, Kalabo, Mongu and return—once weekly—operated by Beaver aircraft.
- (iv) Livingstone, Sesheke, Mongu and return—once weekly operated by Beaver aircraft.
- (v) Lusaka, Broken Hill and return—four times weekly—operated by Beaver aircraft.

(b) *Regional Services:*

- (i) Johannesburg, Salisbury, Lusaka, Ndola, Kasama/Abercorn, Tabora, Nairobi—four times weekly each way—operated by Viking aircraft.
- (ii) Johannesburg, Livingstone, Lusaka, Ndola — twice weekly each way—operated by Viking aircraft.
- (iii) Fort Jameson, Lilongwe, Blantyre—once weekly each way—operated by Dove aircraft.

The following charter operators are established in Northern Rhodesia:

- (a) Zambesi Airways, based at Livingstone, and equipped with two Rapide, one Fox Moth, and one Fairchild aircraft, operate charter flights from that area within the Central African Territories, and specialise in game viewing flights in the vicinity of the Victoria Falls.
- (b) Lusaka Air Charters Limited, based at Lusaka and equipped with one Rapide, one Fairchild and one Cessna aircraft, operate charter services within the Central African Territories and specialise in the carriage of freight.
- (c) Northern Rhodesia Aviation Services, based at Kitwe, and equipped with one Expediter aircraft, operate charter services from that area, but mainly specialise in work for the mining companies.

The Northern Rhodesia Flying Club which is partially subsidised by Government both in its operational work and for pupil pilot training, is mainly active in the Copperbelt area, with zonal branches operating

at Lusaka and Livingstone. This is the first year that the Club has owned and operated its own aircraft, and the fleet consists of four Piper Cubs, one Piper Cruiser and one Stinson Voyager.

The main feature of the work of the Department of Civil Aviation has been the further implementation of international standards and practices laid down by the International Civil Aviation Organisation. Improvements have taken place during the year to the Aeronautical Telecommunications Service including the introduction of teletype links between Livingstone, Salisbury and Bulawayo, and partial introduction between Livingstone and Lusaka. Development in aids to navigation has resulted in complete territorial coverage by MF radio beacons, whilst improvements have been made both to the range and extent of VHF facilities, which now give complete territorial coverage for high flying jet aircraft. The cover within the corridor route for normal piston engined aircraft operations is complete.

Considerable attention has been paid to the requirements of the Comet Jet shortly to be introduced, and successful trials with this particular aircraft have taken place both at Livingstone Airport and at the designated alternative Lusaka Airport. Apart from the Comet, visits were also made to the Territory by the Viscount Prop-Jet airliner, as well as a number of jet-engined fighting aircraft.

The Northern Rhodesia Territorial Meteorological Service was inaugurated during the year and progress has been made in the provision of meteorological forecasting, but the scope of the service has been limited by shortage of trained staff.

Aerodrome improvements have been made at Lusaka, Fort Jameson and Mankoya, while plans for the construction of an improved and enlarged runway at Ndola were completed. Work continues at the new aerodromes at Mongu and Fort Rosebery and survey has been undertaken for the planning of a new aerodrome at Solwezi.

In 1951 there was a considerable increase in the scheduled and non-scheduled aircraft movements, which has resulted in increased passenger and freight loads.

POSTS

Post Offices were established during the year at Luampa and Lukulu (Barotse Province), Mulundu (Western Province), Nakonde (Northern Province), Simango (Southern Province) and at the Livingstone Airport. These additions brought the total number of Post Offices in the Territory to sixty-seven. The offices at Kasama, Katete and Mazabuka were transferred to new buildings and the new premises at Abercorn will be ready for occupation early in 1952.

A twice weekly air mail service was introduced as an addition to the existing mail services between Livingstone and Lusaka and there was a general increase in all types of Post Office business throughout the year.

Money Order and Postal business continued to expand as is evidenced by the comparative statement given below.

		1950		1951	
		Number	Amount £	Number	Amount £
Money Orders:					
Issued	. .	20,446	245,808	23,098	293,850
Paid	. .	9,124	105,960	10,181	119,221
Postal Orders:					
Issued	. .	379,092	282,589	433,039	344,593
Paid—					
British	. .	123,639	90,661	149,139	112,711
Union of South Africa		59,047	48,539	65,002	57,420

Chapter 12 : General

LANDS

The difficulty experienced by local authorities in providing extensions to existing services continues to limit the expansion of most townships, but the demand for plots, particularly in residential areas, increased steadily during the year. Many lessees were even willing to take plots before piped water was available.

The Southern Rhodesia Town Planning Department continued its work in the main towns of the Territory. By the end of 1951 a town plan of Broken Hill had been approved, plans of Lusaka, Chingola and Kitwe were in the final stages of preparation and work was well advanced on the planning of other major towns. Southern Rhodesia Town Planning Staff also paid brief visits to Monze and Mazabuka where they were able to give advice regarding the general lines along which development should follow.

There were 440 applications for agricultural land in 1951 compared with 370 in the previous year, and some 345,000 acres of Crown Land were offered on lease. There was a fair demand for blocks of ten-acre residential smallholdings which have been marked out near each of the Copperbelt towns.

Applications were invited by advertisement for over forty farms at the eastern end of the Mkushi block. The demand for these farms was much smaller than had been expected, and only twenty of them had been granted by the end of 1951. Seventy farms in this area were surveyed by a firm of land surveyors from the Union of South Africa.

SURVEYS

Surveyors of the Department of Surveys and Land were mainly employed on the survey of township plots, the survey of the Copperbelt smallholdings and the demarcation of a block of sixteen farms near Karubwe and seventeen near Mwomboshi. The number of farms alienated again exceeded the number surveyed, and there are now over 400 leased agricultural holdings awaiting survey.

By the end of 1951, two firms of licensed Land Surveyors were established at Lusaka. This is a welcome development for both the general public and the Government.

African Surveyors trained at the school in Broken Hill have continued to do good work; they are particularly useful in demarcating farm boundaries and contouring areas to enable planning to take place.

Surveyors of the Directorate of Colonial Surveys carried out a triangulation survey for the control of mapping in the Western Concession, between Chingola and Solwezi. Air photographs of this area, and of very large areas of the railway line, including the whole Kafue River system, were taken by the Royal Air Force during the dry season.

INFORMATION DEPARTMENT

The radio, the Press, the film and the photograph are the media employed by this Department and there was steady development during the year in day to day output. As a result of research and experiment a fuller understanding was obtained of the problems that must accompany the impact upon the African of such modern methods of propaganda. There was also increased output, mainly on the Press and photographic side, directed to Europeans, a development that inevitably follows the increase in European population and the growth of the European Press.

Press Section.

The number of Press *communiqués* rose to over 100 a month during the year. These *communiqués*, sometimes rather lengthy, formed the basis of news bulletins broadcast daily to Africans from Lusaka and to Europeans from Salisbury, and they were used by all five local newspapers. They were also used to such an extent by the United Kingdom Press that coverage there now almost equals that in the South African Press. Although the issue of *communiqués* was the main work of the Press section, the writing of over fifty feature articles for well known periodicals was also accomplished. Many of these articles were illustrated by the photographer and they were used by the *Illustrated London News*, *Sphere*, *New Commonwealth*, *Times Review of the Colonies* and many other well known journals.

The circulation of the African newspaper *Mutende* rose to over 11,000 during the year. It still has the largest circulation of any of the African newspapers in Central Africa.

Photographic Section

Four film strips were produced as well as the usual large number of display pictures for use in the United Kingdom and other countries. An album of photographs of the Territory, published by Messrs. Waterlow and Sons of London, proved so successful that the whole edition of 1,000 was sold out within a few months. There was a steady flow of Press and publicity photographs to newspapers and journals all over the world.

Tourism

Northern Rhodesia was more popular with tourists in 1951 than ever before, judging from statistics, and they brought some £273,000

of new money into the country during the first six months of the year. The Hotel Board, which began its activities during the year, has already effected some general improvement in hotels. The Department is represented on the Board by the Director and the Tourist Officer. The big game safari scheme proved as popular as ever and a new rest house, built on the Great East Road with departmental funds, will help still further in popularising the attractive game areas of the Eastern Province.

Film Section

One of the productions of the film section was televised by the British Broadcasting Corporation and nine others were used in commercial news reels, such as Paramount, British News, and African Mirror. The filming of development projects for use in both African and European cinemas continued steadily. The film library, mainly for use by African cinemas, was increased to over 1,200 films and served 146 borrowers during the year. These included European farmers and industrial employers in addition to welfare centres, Bomas and Missions, and the rising figure is indicative of the enhanced importance of the film as an amenity for Africans of all classes.

Broadcasting

The Central African Broadcasting Station at Lusaka broadcasts to Africans in Southern Rhodesia and Nyasaland, as well as to those in Northern Rhodesia, in six African languages and in English. Many new programmes were introduced during the year including a Sunday morning broadcast in English for the more educated Africans. Listener research revealed an increasing demand for B.B.C. news and talks. This is interesting since, although the Africans want such items, they do not fully understand them. The growing class of educated and politically minded Africans is using the radio increasingly as an educational medium. The power and value of the radio is indicated by the fact that about 50,000 Africans listen in to Lusaka daily throughout Central Africa. As a result of extensive tours by the recording van in Nyasaland and Northern Rhodesia and the appointment of a liaison officer in Southern Rhodesia, over 3,000 recordings were made. The library now contains a very extensive collection of records of African music which is as valuable historically as it is for broadcasting purposes. On the technical side a new 15 KW transmitter came on the air in June and puts down a strong signal throughout the whole area covered by Lusaka broadcasts.

PUBLICATIONS BUREAU

The Northern Rhodesia and Nyasaland Publications Bureau has carried on since 1948 the work of arranging to publish and distribute

books of general interest for Africans, which had formerly been undertaken by the Northern Rhodesia Literature Committee and the Nyasaland Education Department. It is largely financed from Colonial Development and Welfare Funds. Its main objects are to encourage African authors; to create, mainly by providing for it, the love of books and the habit of reading for pleasure; and to lay the foundations of a healthy independent book trade.

The scope and volume of work entailed in the preparation of manuscripts for publication surpasses the personal resources of the staff and a good proportion of their time is spent in arranging to utilise and remunerate the expert services of others, linguists, artists, typists, and men of letters.

During 1951 twenty-one new titles and three reprints of new editions were produced, totalling some 110,000 volumes. A total of 178 manuscripts were submitted, nearly fifty less than in 1950; this drop is more than accounted for by the response in the previous year to a Film Competition for which there were more than one hundred entries. Manuscripts submitted without the stimulus of competitions have actually doubled in number. It is hoped to encourage both the buying and writing of books still further by a series of broadcast book-reviews and talks in all four main vernaculars and in English, which were prepared during the latter part of 1951.

Research into the popularity of existing books and into such matters as cover design and general format is being continued, both formally by representatives of the Rhodes-Livingstone Institute, under Dr. J. C. Mitchell, and informally by Bureau staff.

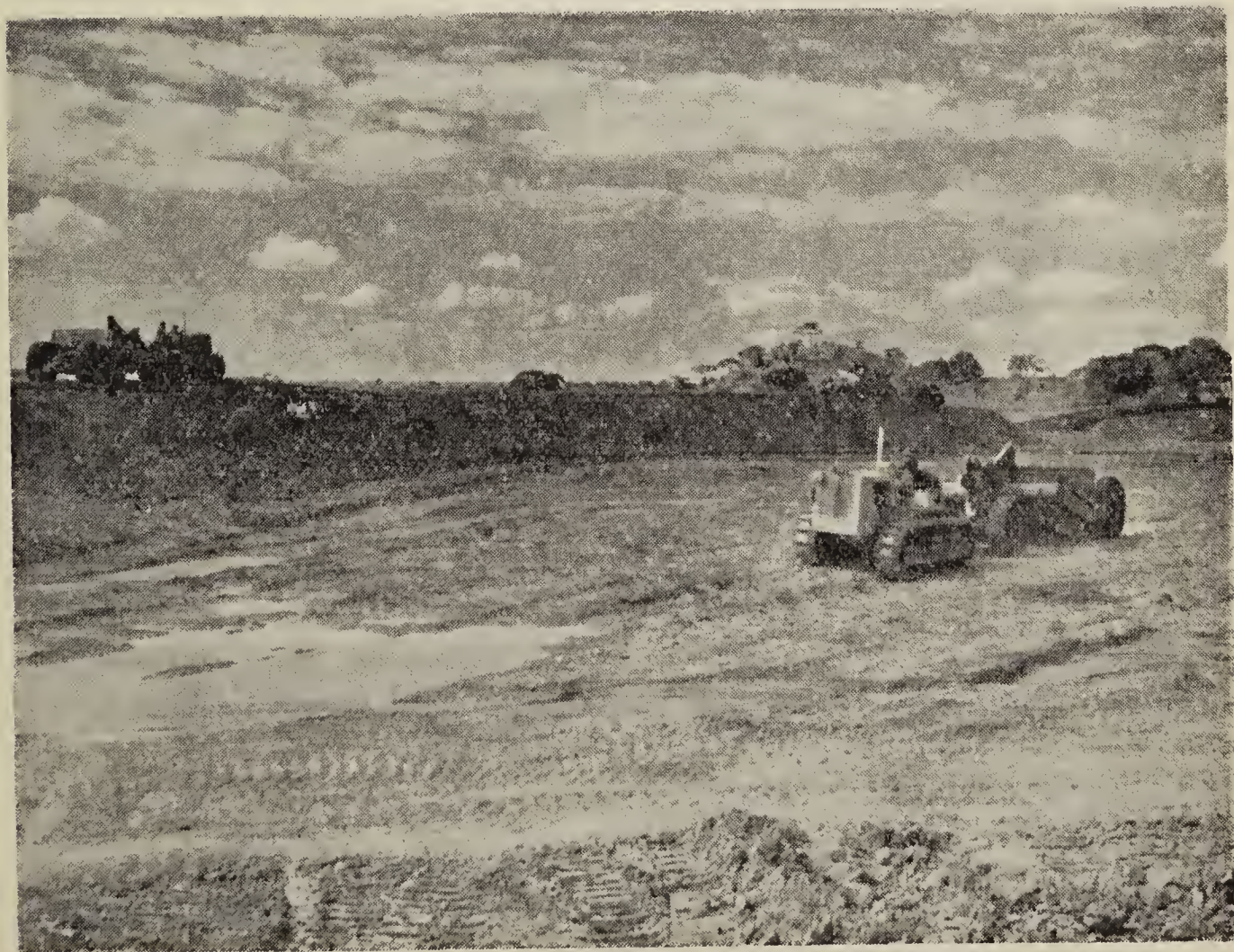
Negotiation with publishers forms a large part of the Bureau's routine: many of the books are published by British firms of tradition and enterprise, such as Longmans, the Oxford University Press and Macmillans.

A system of guarantees for sales of a maximum number of copies of each edition has been worked out with far-reaching results. An important side of the work consists in calculating and watching these guarantees and keeping a check on production and expenditure in relation to sales.

Thus the building up of a satisfactory distribution system is perhaps the greatest problem. The large areas involved, the still considerable proportion of illiteracy, and above all the fact that the habit of reading for pleasure has not been established, constitute obstacles that can only be overcome gradually. In Northern Rhodesia marketing is in the hands of the United Society for Christian Literature. In Nyasaland distribution is managed by the Bureau's Business Assistant



A SALE IN PROGRESS AT THE TOBACCO AUCTION FLOORS, FORT JAMESON



DAM BUILDING

but on commercial lines. In both countries branches and agencies are being set up not only in the towns but also in the rural areas, and the safe school trade is used as support for the expansion of sales to the public.

DEPARTMENT OF GAME AND TSETSE CONTROL

The Kafue National Park, which was declared in 1950, already shows great promise. During the 1951 dry season remarkable numbers of game were to be seen, particularly in the Southern section, and it is now proposed to arrange a limited opening of this section for the Rhodes Centenary Celebrations in 1953.

Three new Game Reserves were gazetted, the Lunga, Fort Rosebery and Lundazi Dam Reserves, and these have added 1,355 square miles to the 9,500 of the nine older Reserves. Two small reserves were replaced by a Controlled Area, in which latter category most worthwhile game areas now lie. Satisfactory progress continues to be made in developing game conservation generally, special attention being paid to the Reserves and Controlled Areas. The conducted hunting party scheme in the Luangwa Valley was very successful. All the parties enjoyed excellent hunting and Chief Nsefu's Game Camp, which is situated in the Valley, attracted twice the number of visitors it had in the previous year. Its success has prompted a neighbouring Chief to establish similar facilities in his own area.

The vermin control service in the farming areas continued to be in great demand, and considerable success has been achieved against destructive animals.

Tsetse survey and reclamation work has progressed satisfactorily. The success hitherto achieved in the Fort Jameson district, the Kafue (North Bank) area and the Feira Area, was consolidated, although in the latter two areas the administrative dispositions needed to make economic use of the results are still pending. 'Discriminative clearing' of bush in the Kalomo area, in which the same techniques as those which have proved so successful in the Abercorn area were employed, has shown very satisfactory effects against *Glossina morsitans*. Investigations into the possibilities of using insecticides against tsetse were instituted under an Entomologist provided by the generosity of the Beit Trustees, but the general result has been that, except in special limited cases, insecticidal techniques are likely to be uneconomic owing to the vast and thinly populated areas concerned.

Natural History. Co-operation by members of the Department continued with the National Museum of Southern Rhodesia and other institutions in the collection of birds and mammals for scientific purposes, and Mr. D. G. Lancaster, Assistant Game Warden, completed

a *Check List of the Mammals of Northern Rhodesia* which will shortly be published. This latter work will parallel the existing *Check List of the Birds of Northern Rhodesia*, and constitutes a valuable addition to knowledge of the Territory's fauna.

Chapter 13 : Cultural and Social Activities

The Rhodes-Livingstone Museum.

The Rhodes-Livingstone Museum at Livingstone, is the Territory's National Museum. It had its origin in 1930 as a collection of objects of African material culture. In 1934, when the capital was still at Livingstone, the then Governor, His Excellency Sir Hubert Young, conceived the idea of extending the collections to become a memorial to the great Central African explorer, David Livingstone. In that year also, the Museum, then called the David Livingstone Memorial Museum, was given its first home and the collections were open to members of the public. Later through private benefactors and purchases, a good collection of Livingstone's letters and other objects of personal interest was acquired.

In 1946 it was recognised that it would be necessary to build a new museum with adequate display, store and workroom facilities. A building fund was accordingly opened and the necessary funds most generously subscribed by the Government and private benefactors such as the B.S.A. Company, de Beers, the Copper Mining Companies, the Beit and Rhodes Trusts, the Kitwe Lottery and others. Owing to building restrictions, lack of materials and rising costs the new Museum was not finally completed, and the showcases in position, until the end of December, 1950. The collections were moved into the new building and the exhibits set up in time for the official opening which was performed by Colonel Sir Ellis Robins, D.S.O., on the 5th May, 1951. It may be claimed that the new Museum sets a new standard for similar institutions in Southern Africa. The building is in the form of a hollow square with a courtyard in the centre. It is built all on one floor, with the exception of a tower containing a clock and look-out room, from which fine views can be obtained of the Victoria Falls and the Zambezi Valley.

Bearing in mind the reasons for its foundation, the Museum collections on exhibition are confined to the study of the development and history of man in Northern Rhodesia from the earliest times until the present day. It is not the policy in a Museum of this size to mix zoological, botanic or geological exhibits with the ethnological or historical ones except in so far as they help to interpret the story of the people who have lived or who are living in the Territory or who have influenced its history. The nucleus of a small Natural History collection is already planned for permanent exhibition in Lusaka, the capital,

and as this collection grows and funds permit it is hoped to expand it into the Natural History Museum.

The building itself, which was designed by the late Major Roberts, O.B.E., is in a pleasing Spanish-American style and blends well into the background of orange Kalahari sand and large evergreen trees which are the natural surroundings of Livingstone. The collections are displayed in a logical sequence so that the visitor starts with the earliest material, the remains of the Stone Age, and progresses through the collections of material culture of the indigenous Bantu tribes, to the historical exhibits and those dealing with the modern industrial development of the Territory. The Museum has always attempted to bring out the human significance of an object or set of exhibits, and experiments have been made with colour variation schematic figures, clay models, charts and maps with success.

The museum houses the best collection of Northern Rhodesian prehistoric remains yet recovered, a very fine collection of the material culture of the existing Bantu tribes (much of which is no longer made and has therefore become unobtainable), and a good series of exhibits explaining the history of the Territory since its discovery by Europeans. Of particular interest, however, are the personal letters and relics of David Livingstone. The Museum houses over sixty of his letters as well as his sketch book with the first sketch ever made of the Victoria Falls, in 1860, and various other diaries. Also worthy of note is the collection of early maps of Africa.

The Museum carries out research into African prehistory and ethnographic problems and, to assist the Curator in this, the Trustees have appointed an ethnographer who will take up his duties in January, 1952. Various expeditions are undertaken every year, either alone or in conjunction with other museums and important collections have been made in this way.

A visual aid programme for European and African schools takes the form of cinematograph shows, travelling loan exhibits, a film strip library and lectures to classes in the Museum.

The Library is growing rapidly and contains good reference sections on the subjects with which the Museum deals.

The Northern Rhodesia Society.

The Northern Rhodesia Society was founded in 1950 and held its inaugural meeting at Livingstone in 1951. It has its headquarters at the Museum and its objects are to promote the study of ethnology, geography, natural history and kindred sciences in their relation to Northern Rhodesia; to co-operate with the Rhodes-Livingstone Museum and the Rhodes-Livingstone Institute to this end; and to

encourage and facilitate the publication of records and studies in these subjects. In pursuance of these aims, a major activity of the Society is the twice-yearly publication of *The Northern Rhodesia Journal*.

Rhodes-Livingstone Institute.

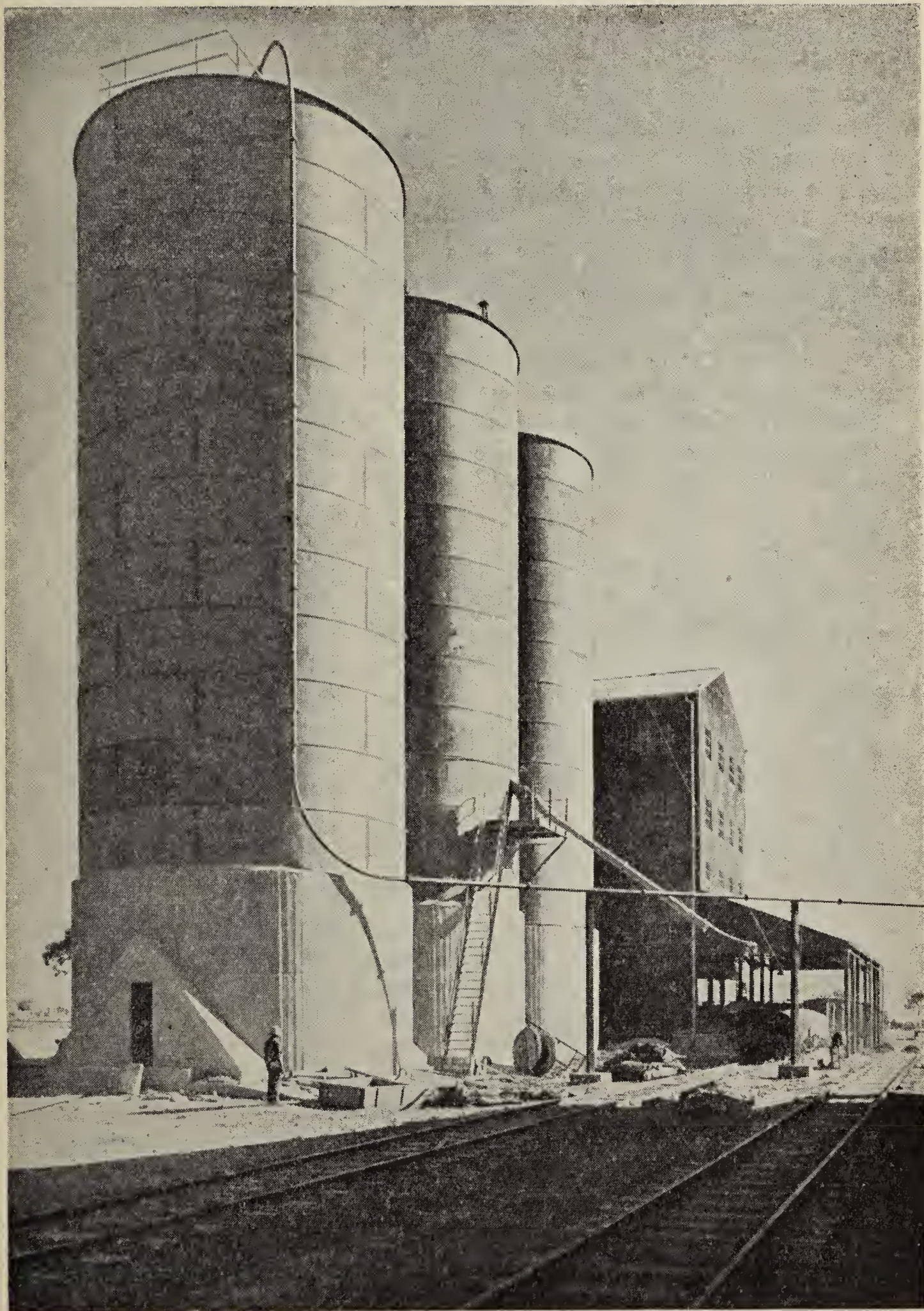
For the Rhodes-Livingstone Institute, which has its headquarters at Livingstone, 1951 was the second year of the five-year Omnibus Research Scheme which is financed by grants from the Colonial Development and Welfare Fund, by grants from Central and East African Governments and by generous donations from various private companies.

The work of the Institute during the year was handicapped by a shortage of staff. Dr. Elizabeth Colson, the Director, became ill in July while she was at Manchester University completing a paper on the Mazabuka Tonga of Northern Rhodesia, and had to resign. Dr. Mitchell, the Senior Research Officer of the Institute was appointed Director in her place at the end of the year. A lady anthropologist, who in 1950 had been appointed to undertake a study of the Lakeside Tonga in Nyasaland, arrived in March, but in June she found it necessary to resign. Another anthropologist was appointed in her place, but too late to start the field work in 1951. The Senior Research Officer of the Institute continued his sociological study of urban problems in the Copperbelt of Northern Rhodesia and also acted as Adviser to research officers during the year. Four other anthropologists were engaged on field studies during the year. One who was working in the Luapula Valley of Northern Rhodesia made a special study of the Luapula fishing industry. He completed his research in August and returned to England. Another spent the year undertaking research among the Lunda people in the Mwinilunga District of Northern Rhodesia. He will continue his study of the Lunda-Lovale people in 1952.

A third has written a book on *Shona Customary Law*, which will be published shortly, and the fourth, whose field of study lay among the Ndebele in Southern Rhodesia, spent a part of the year on his preliminary work. The historian appointed in 1950 to study the history of Central Africa, arrived in Salisbury in May, 1951, where he began research into the archives of the three Central African Territories, which will form the basis of the history. One other new appointment was made during the year—an anthropologist to undertake the study of the Mambwe-Lungu Tribes in Northern Rhodesia.

Dramatics and Music.

Dramatic societies were active in all the principal townships of the Territory, as well as in the larger provincial centres such as Kasama and Fort Jameson. By far the most flourishing of all the cultural clubs, these progressive societies decided in 1951 to form themselves into a



CEMENT SILOS AT CHILANGA

national association. Most ambitious of the affiliated societies is the Lusaka Theatre Club which stages plays at regular and frequent intervals, with the standard of performances on a par with the repertory theatre. Open-air Shakespearean plays are now an annual feature in Lusaka. In 1951 *Taming of the Shrew* was produced in which a promising wealth of stage talent was revealed.

The Lusaka Musical Society put on two concerts with visiting artistes, while both the Broken Hill Musical and Dramatic Society and the Ndola Musical Society enjoyed successful seasons, the last-named's concert version of *The Vagabond King* being extremely popular.

Plans are in hand for the further encouragement of dramatic and musical organisations throughout the Territory and it is hoped that funds will soon become available for the construction of modern theatres at some of the more important centres.

Other Activities.

All the major sports are catered for in the larger towns, and in addition, Livingstone has the Zambezi Boating Club, the oldest in the country, having held its first regatta in 1905. Inter-territorial contests between the two Rhodesias are held annually in rugby football, association football, cricket, boxing and athletics. In 1951 the first of an annual series of polo matches between the two Rhodesias was played at Nkana. These events take place in alternate years in Northern Rhodesia and Southern Rhodesia. In 1951 Northern Rhodesia took the honours in the rugby football and boxing fixtures. The year was also notable for the visits of the British Women's golf team, the Danish badminton team and the rugby XV from West Griqualand.

There are eleven rifle clubs in Northern Rhodesia and a "Bisley" meeting was held during the Easter week-end. Flying is also a popular pastime and the Flying Club of Northern Rhodesia stages an annual rally which grows in importance each year.

The Lusaka Turf Club, which holds several meetings during the year, moved to new headquarters in 1951 when the Northern Rhodesia Agricultural Society opened their new show ground and racecourse at Lusaka.

Debating, philatelic and kindred societies and camera clubs play an ever increasing part in the social life of the Territory. There are camera clubs at Luanshya, Livingstone, Mufulira and Lusaka, philatelic societies at Lusaka and Ndola and a lively debating society at Mufulira, all of which operated vigorously during the year.

During 1951 the Northern Rhodesia representative of the British Council organised the first Art Exhibition by local artists at Ndola.

PART III

Chapter 1 : Geography and Climate

The Protectorate of Northern Rhodesia lies on the plateau of Central Africa between the longitudes 22° E. and $33^{\circ} 33'$ E. and between the latitudes $8^{\circ} 15'$ S. and 18° S. Its area is 290,323 square miles, and its boundaries are 3,515 miles in length.

Its neighbouring territories are Angola (Portuguese West Africa) on the west, the Belgian Congo on the north and north-west, Tanganyika Territory on the north-east, Nyasaland on the east, Portuguese East Africa and Southern Rhodesia on the south-east and south and the Caprivi Strip of South-West Africa on the south. The Zambezi River forms the boundary of Northern Rhodesia on the south for about 520 miles, separating it from the Caprivi Strip and Southern Rhodesia, whilst the Luapula River forms another natural boundary between the Protectorate and the Belgian Congo, along the northern edge of the Congo Pedicle and north as far as Lake Mweru, for a distance of about 300 miles. The remaining boundaries follow watersheds and occasional streams or are marked by beacons across land areas.

With the exception of the valleys of the Zambezi, the Luapula, the Kafue and the Luangwa Rivers the greater part of Northern Rhodesia has a flat to rolling topography, with elevations varying from 3,000 to 5,000 feet above sea level, but in the north-eastern districts the plateau rises to occasional altitudes of over 5,000 feet. In many localities the evenness of the plateau is broken by hills, sometimes occurring as chains which develop into areas of broken country. The highest group of hills is the Muchinga Mountains which form part of the Great Escarpment running down the western edge of the Luangwa River Valley, and of these, individual peaks rise to about 8,000 feet.

On the whole the Territory is well wooded, even the crests of the highest hills bearing trees and orchard-like bush. Hundreds of square miles of country lie under tall grass along the Kafue in an area known as the Kafue Flats, in the Barotse Plains near the Zambezi and also over a large area south of Lake Bangweulu. These open grassy spaces, for the most part, contain swamps in which the water level fluctuates with the rainy seasons. The southern and central districts comprise

areas where sparse bush alternates with grass lands in which farming and ranching have developed.

A glance at a large-scale map suggests that the Territory is well watered, but many of the smaller rivers shown have a seasonal flow and dry up after the rains. The larger rivers, the Zambezi, Kafue, Luangwa, Chambeshi and Luapula, together with their larger tributaries, have an all-year-round flow. The three great lakes of Northern Rhodesia are Lake Bangweulu in the northern districts and Lakes Mweru and Tanganyika on the northern boundaries. Lake Bangweulu and the swamps at its southern end cover an area of about 3,800 square miles, and there are a number of other much smaller lakes such as Lake Young in the Mpika District, Lake Chila near Abercorn, Lake Chirengwa near Ndola and Lusiwasi Lake (or Lake Moir) off the Great North Road to the north of Serenje. Northern Rhodesia has the greatest waterfall in the world, the Victoria Falls, on its southern boundary and the second highest waterfall in Africa, Kalambo Falls, 704 feet, on its northern border.

Although Northern Rhodesia lies within the tropics, and fairly centrally in the great land mass of the African continent, its elevation relieves it from the extremely high temperatures and humidity usually associated with tropical countries. The lower reaches of the Zambezi, Luangwa and Kafue rivers in deeper valleys do experience high humidity and trying extremes of heat, but these areas are remote and sparsely populated.

The year may be conveniently divided into the rainy season, the winter months and the hot season. The rains occur between November and April and are copious while they last, varying from an average of twenty-five to thirty inches a year in the south to over fifty inches a year in the north. For the most part the rains fall in a series of thunderstorms and showers with only rare periods of continuous rain over several days. Even during the rains a fair amount of sunshine is recorded.

During the winter months—May to August—fair, cool weather with a moderate breeze is the general rule. Night temperatures are low, and ground frost occurs quite frequently in sheltered valleys. Day temperatures are comfortably warm, except on occasional grey cloudy days.

The hot season is short, the months of October and November being the hottest, when day temperatures go up to 80 to 100 degrees, depending upon locality. Towards the end of the hot season night temperatures tend to rise and there is a generally oppressive feeling in the air which is only relieved by the advent of the rains.

The following table gives the average minimum and maximum temperatures and dewpoints at six stations of varying altitudes for three representative months.

	January			July			October		
	Max. Temp. °F.	Min. Temp. °F.	Dew- point °F.	Max. Temp. °F.	Min. Temp. °F.	Dew- point °F.	Max. Temp. °F.	Min. Temp. °F.	Dew- point °F.
Abercorn, 5,454 ft. .	76	59	60	77	51	47	84	60	51
Kasama, 4,544 ft. .	79	61	63	76	50	48	88	62	50
Lusaka, 4,191 ft. .	78	63	64	73	50	44	88	64	49
Fort Jameson, 3,756 ft. .	81	65	64	77	53	49	90	67	54
Livingstone, 3,161 ft. .	84	66	66	79	45	42	95	67	52
Luangwa Bridge, 1,324 ft.	89	72	72	85	54	51	101	74	57

Chapter 2 : History

Relics of prehistoric man have been found in Northern Rhodesia, in particular the skull of *Homo rhodesiensis* in the Broken Hill Mine, and Stone Age culture around the Victoria Falls. At a rough estimate they suggest human occupation at anything between 20,000 and 50,000 years ago, though an exhaustive examination of all possible areas has yet to be undertaken. The early history of Northern Rhodesia is fragmentary and can only be gleaned from tribal histories, which are subject to doubt, since they are passed down by word of mouth from generation to generation, and from the accounts of the few explorers who penetrated the "Dark Continent" from the east and west coasts.

The Portuguese Governor of Sena, Dr. Lacerda, encouraged by the report of the half-breed Fereira who returned from Kasembe's capital, close to the eastern shores of Lake Mweru, in June, 1798, left Tete for the north. He was accompanied by Fathers Francisco, Jose and Pinto, twelve officers and fifty men-at-arms, but failed to reach his goal, and died within a few miles of Kasembe's capital. Father Pinto led the remnants of the expedition back to Sena, and it is from Dr. Lacerda's diaries, which Father Pinto with great difficulty saved, that the first authentic history of what is now North-Eastern Rhodesia is taken. Dr. Lacerda was followed in the early nineteenth century by two Portuguese traders, Baptista and Jose, who brought back stories of the great interior kingdom of the Lunda, which extended from Lake Mweru to the confines of Barotseland and included the whole of the country drained by the Upper Congo and its tributaries. This kingdom is reputed to have lasted from the sixteenth to the nineteenth century. Very few historical facts are known about it, but the name of Mwatiamvwa or Mwachiamvwa, the dynastic title of the paramount chief, is associated, like Monomotapa, with many half-legendary stories. Neither of these expeditions was of any great geographical value, and it was not till 1851, when Dr. Livingstone made his great missionary journeys and travelled through Barotseland and in 1855 discovered the Victoria Falls, that the civilised world had its first authentic information of Northern Rhodesia. Other and later explorers who brought back stories of the barbarism of the natives, of the wealth of game, and of the glories of the Victoria Falls, were Serpa Pinto, Cameron, Selous and Arnot.

From the very early days when the hordes of migratory Bantu swept southwards from Central and Northern Africa, Northern Rhodesia has been subject to constant invasion from stronger tribes on its

borders, so much so that the vast majority of the present native population, though of Bantu origin, is descended from men who themselves invaded this country not earlier than A.D. 1700. One or two small tribes, numbering now only a very few thousand, such as the Subia on the Zambezi, are all that remain of the inhabitants of Northern Rhodesia prior to that date. Though the story of these invasions has passed into oblivion, their traces remain in the extraordinary number and diversity of races and of languages in the country.

At the present time the population of the Territory has been classified into seventy-three different tribes, the most important of which are the Bemba, Ngoni, Chewa and Bisa in the north-eastern districts, the Lozi, Tonga, Luvala, Lenje and Ila in the north-western districts, and the Senga, Lala and Lunda, sections of which are resident in both the eastern and western areas. There are some thirty different dialects in use, but many of them vary so slightly that a knowledge of six of the principal languages will enable a person to converse with every native of the country. Nyanja is in use as the official language of the police and of the Northern Rhodesia Regiment, and is probably the language most generally spoken by Europeans. In many instances the tribes overlap and encroach upon each other, and it is not uncommon to find a group of villages of one tribe entirely surrounded by villages of another tribe. Many of the tribes on the borders extended into neighbouring territories; in some instances the paramount chief resides in a foreign country and only a small proportion of the tribe lives in Northern Rhodesia.

The chief invaders of the early part of the nineteenth century were the Arabs from the north, the Ngoni, a branch of the early Zulus who fled from the oppressive tyranny of Tschaka and who settled in the north-east of the Territory, and the Kilolo, an offshoot of the Suto family, who in the beginning of the nineteenth century fought their way from the south through Bechuanaland and across the Zambezi under the noted Chief Sebitoani; they conquered the Toka, the Subia, and the Lozi and founded a kingdom which was distinguished by a comparatively high degree of social organisation.

The duration of the Kalolo kingdom was short, lasting between twenty and thirty years. Soon after the death of Sebitoani, the Lozi rebelled and massacred the Kalolo to a man, keeping their women. As a result of this the influence of their occupation is still to be seen in the Kalolo language, which is largely spoken amongst the tribes near the Zambezi. The Lozi under Lewanika enlarged their kingdom by conquering several surrounding tribes, such as the Nkoya, the Lovale and the Toka. Beyond these limits their authority was both nebulous and ephemeral.

In the year 1891 Lewanika was informed that the protection of Her Majesty's Government had been extended to his country as he had requested that it should be, and on 17th October, 1900, the Barotse Concession was signed by him and his chiefs and representatives of the Chartered Company. The concession was confirmed in due course by the Secretary of State for the Colonies, and under its terms the Company acquired certain trading and mineral rights over the whole of Lewanika's dominion, while the paramount chief was to receive, among other advantages, an annual subsidy of £850.

During this time the slave trade established by the Arabs continued unchecked. Its baleful influence had gradually spread from the shores of Lake Nyasa and Tanganyika over the whole Territory ; but with the establishment of a Government post at Abercorn in 1892 the slave trade in this part of Africa received its first serious check. In each succeeding year more Arab settlements on the lake shore were destroyed. Sir Harry Johnston defeated the Arab chief Mlozi at Karonga in 1894, and the last caravan of slaves, which was intercepted on its way to the east coast, was released at Fort Jameson in 1898. Even after that, bands of slave-raiders were occasionally encountered on the north-east boundary and skirmishes with them took place as late as 1900 ; but with the final establishment of the administration of the British South Africa Company the slavers quickly disappeared from the country. The status of the conquered tribes under Lewanika's dominion was that of a mild form of slavery. This social serfdom was brought to an end by the edict of Lewanika, who in 1906 agreed to the emancipation of the slave tribes.

Before 1899 the whole Territory had been vaguely included in the Charter granted to the British South Africa Company, but in that year the Barotseland-North-Western Rhodesia Order in Council placed the Company's administration of the western portion of the country on a firm basis. It was closely followed by the North-Eastern Rhodesia Order in Council of 1900 which had a similar effect. The two territories were amalgamated in 1911 under the designation of Northern Rhodesia, and the administration of the Company (subject to the exercise of certain powers of control by the Crown) continued until 1924. In that year the administration of the Territory was assumed by the Crown in terms of a settlement arrived at between the Crown and the Company, and the first Governor was appointed on 1st April, 1924.

In the years that followed came the development of Northern Rhodesia's great copper industry. A bad start with the Bwana M'kubwa crash, one of the biggest mining fiascos in African history, was prelude to a brilliant future. The Territory's four big mines at Luanshya,



NEW BUILDING OF THE RHODES-LIVINGSTONE MUSEUM



INSIDE THE MUSEUM

Nkana, Mufulira and Nchanga came into production shortly after Bwana M'kubwa collapsed in 1930. These four mines have altered the entire economic outlook of the Protectorate. A country whose progress rested on an annual revenue of about half a million pounds in a few years was netting ten million and more annually, and building up reserve funds of several million pounds. It is largely upon copper that the new schools, hospitals, roads and other recent witnesses to increasing prosperity are founded.

Chapter 3 : Administration

CENTRAL ADMINISTRATION

The constitution of Northern Rhodesia provides for an Executive Council and a Legislative Council. There is a majority of Unofficial Members over Official Members in the Legislative Council.

The Legislative Council is presided over by a Speaker and contains nine Official Members and fourteen Unofficial Members, of whom four are nominated to represent African interests. Two of these are Africans.

The Executive Council is presided over by the Governor and in 1951 consisted of seven Official Members and four Unofficial Members. One of the Unofficial Members represents African interests.

LOCAL ADMINISTRATION

The system of indirect rule is in force, under which Native Authorities with their own Treasuries are constituted with powers defined by Statute. The Native Authorities can make orders, subject to the veto of the Provincial Commissioner, which have the force of regulations under the law. Such orders are made on minor matters affecting the welfare of the area concerned, markets, agriculture, forestry, game conservation, and so on. The Native Authorities can also make rules, subject to the approval of the Governor, such rules constituting more important local legislation for the peace, good order and welfare of the people of the area concerned, and including the levying of local rates and fees. The majority of Native Authorities exercise their financial powers by raising levies for general or special purposes such as education. In addition the Native Authorities are allocated a share of the Central Government's Native Tax.

The Provincial Councils instituted in 1943 continued to prove their use as vehicles of African opinion. The standard of the debates improved and their scope widened to include a large variety of topics of all degrees of importance. These Councils consist of members selected by Native Authority Councils, Urban Advisory Councils and certain other bodies and are thus representative of all elements of the African community. They are at liberty to raise and debate any matter they wish. Their functions are advisory but Government pays careful attention to the views and wishes expressed. It is gratifying to note how well the rural and urban representatives mix and debate matters of general interest. From the councils, five in number, and from Barotseland, delegates are elected to attend an African Representative Council

for the Territory, where the procedure is as nearly as possible that of Legislative Council. The African Representative Council is, like the Provincial Councils, advisory. All draft legislation affecting Africans is referred to these Councils before submission to Legislative Council.

Since 1948 two Africans, selected by the African Representative Council from among its members by secret ballot have been appointed to the Legislative Council by the Governor.

LOCAL GOVERNMENT

The Local Government Department, under the control of the Member for Health and Local Government, who is an Unofficial Member of Legislative Council, is responsible for administering the local government of the Territory. The principal officers of the Department are all specialised in Local Government, holding professional qualifications and having had experience in the United Kingdom and other territories. There is also a Municipal Association of Northern Rhodesia comprising representatives from all the local authorities and which association takes a leading part in co-ordinating opinions and in initiating policy or legislation. The Local Government Department co-operates fully with the Association.

There are two Municipal Councils and thirteen Town Management Boards, the distinction being one of dignity and comparative powers. In addition there are five African Township Management Boards, with local government powers, in certain African suburbs on the Copperbelt. The establishment of these African Townships has been successful and it is hoped to establish at least three additional townships during 1952.

The major authorities in the Territory have elected majorities. The franchise derives from the ownership or occupation of rateable property. All councils and boards are authorities under Public Health legislation, can raise rates, borrow money, own and manage housing schemes and are in control of roads and public services in their areas. They are not responsible authorities for education or medical services but are advisory on town planning and land matters. The Councils of municipalities may make by-laws and raise loans from sources other than the Government. Township Management Boards borrow all necessary loan money from the Government and work under Township Regulations, enacted by the Governor in Council. In this connection the Municipal Association plays an important part and is always consulted before regulations are enacted. It has been the Government's policy to foster and encourage local autonomy and initiative by extending the powers of local authorities.

The following table shows the gross revenue and expenditure and outstanding loan liabilities of local authorities for the years 1945 to 1951 and from which will be seen the phenomenal growth of local

government activities and responsibilities which has taken place in recent years.

	Gross Recurrent Revenue £	Gross Recurrent Expenditure £	Loan Liabilities £
1945 . . .	170,562	162,705	250,662
1946 . . .	188,689	182,029	291,510
1947 . . .	226,995	220,009	357,935
1948 . . .	279,541	263,237	492,900
1949 . . .	356,726	328,349	709,626
1950 . . .	459,971	415,943	921,473
1951 (estimated) .	561,906	558,565	1,470,000

During 1951 the Government made loan money, amounting to £800,000, available to local authorities for the purpose of building flats for letting or sale to people of the lower income groups. A Small House Bureau Scheme was also inaugurated with the co-operation of the Northern Rhodesia Society of Architects. Under this scheme the Association prepared a brochure of plans of smaller type houses which were made available to the public who could use the plans at considerably reduced fees.

The salient points of the scheme of Government grants to local authorities are that the Government pays contribution in lieu of rates on all government rateable property, meets one-half of the Public Health expenditure incurred by local authorities, is financially responsible for the cost of national roads passing through a town, and makes over one-half of all motor licence fees collected in the town. There are also certain minor grants including an African Housing Subsidy. The revenue of local authorities, apart from these grants, is mainly derived from rating, although certain local authorities make a profit from their water and electricity undertakings. The differential rating system is followed, i.e., the local authority may levy rates at different amounts on the capital value on lands and/or buildings. The table in Appendix VII shows the assessable values and rates in the principal towns for 1951.

In addition to the local authorities mentioned there are five Mine Township Management Boards appointed to supervise the affairs of the five Mining Townships. These Mine Management Boards are not subject to the same degree of central government control as other townships, nor do they receive Government grants. The only local government activities outside towns and Native areas is the work of Road Boards in farming areas. These Boards, which are nominated Boards and do not possess rating powers, administer funds for road construction work and maintenance voted by the Government. Consideration is being given to the establishment of District Councils by the fusion of one or more Road Boards and smaller townships into single units. The object is to create a local government unit with greater financial resources and capable of being given wider powers and of employing more specialised staff.

Chapter 4 : Weights and Measures

Imperial Weights and Measures are in use in the Territory. The accuracy of the secondary standards is verified by comparison with the territorial standards before inspections are undertaken. The Inspector is under the control of the Commissioner of Police. During 1951 a total of 7,214 weighing and measuring instruments, weights and measures were inspected. Service and repair facilities in the Territory are steadily improving.

Chapter 5 : Newspapers and Periodicals

There are four European newspapers published in the Territory, and one of them, *The Northern News*, which was taken over in 1950 by the Argus Group of newspapers of South Africa, started bi-weekly publication in 1951. The list of newspapers published within the Territory is as follows:

Newspapers

<i>The Northern News</i>	Twice weekly
<i>The Central African Post</i>	Weekly
<i>The Livingstone Mail</i>	Weekly
<i>The Northern Rhodesia Advertiser</i>	Weekly
<i>Mutende</i> (African Newspaper)	Weekly

Periodicals

<i>The Northern Rhodesia Farmers' Journal</i>	Monthly
<i>The Scouter</i>	Monthly
<i>Rhokana Review</i>	Monthly
<i>The Salaried Staff and Mine Officials' Magazine</i>	Monthly
<i>The Church News</i>	Monthly
<i>The Northern Rhodesia Journal</i>	Twice yearly

For official purposes, the *Government Gazette* is issued weekly by the Government Printer, Lusaka. It contains only official announcements and notices, Ordinances, and such matters as have to be published by law for public information.

Chapter 6 : Bibliography

PUBLICATIONS OF GENERAL INTEREST RELATING TO NORTHERN RHODESIA

A.—EARLY TRAVEL

1. *Missionary Travels and Researches in South Africa, including a sketch of Sixteen Years' Residence in the Interior of Africa and a Journey from the Cape of Good Hope to Loanda on the West Coast; thence Across the Continent, Down the River Zambesi, to the Eastern Ocean.* By David Livingstone. (John Murray, London, 1857.)
2. *Narrative of an Expedition to the Zambesi and its Tributaries, and of the Discovery of the Lakes Shirwa and Nyasa, 1858—1864.* By David and Charles Livingstone. (John Murray, London, 1865.)
3. *The Lands of the Cazembe.* Translation of Dr. Lacerda's diaries and information about Portuguese expeditions, by Sir Richard Burton. Published by the Royal Geographical Society. (John Murray, London, 1873.)
4. *The Last Journals of David Livingstone in Central Africa from 1865 to his Death, continued by a Narrative of His Last Moments and Sufferings, obtained from His Faithful Servants Chuma and Susi.* By Horace Waller. Two volumes. (John Murray, London, 1874.)
5. *Across Africa.* By V. L. Cameron. (Daldy, Isbister, 1877.)
6. *How I Crossed Africa.* By Serpa Pinto. (Sampson, Low and Co., 1881.)
7. *To the Central African Lakes and Back.* By Joseph Thomson. (Sampson, Low and Co., 1881.)
8. *De Angola a Contra Costa.* By Capello and Ivens. (1886.)
9. *Garenganze.* By F. S. Arnot. (James E. Hawkins, 1889.)
10. *Les Lacs de l'Afrique Equatoriale.* By G. V. Giraud. (1890.)
11. *My Second Journey Through Equatorial Africa.* By H. Van Wissman. (Chatto and Windus, 1891.)
12. *Reality versus Romance in South Central Africa.* By James Johnston. (Hodder and Stoughton, 1893.)
13. *Travel and Adventure in South-East Africa.* By F. C. Selous. (Rowland Ward, 1893.)
14. *Livingstone and the Exploration of Central Africa.* By Sir H. H. Johnston. (Philip and Son, London, 1894.)
15. *A Hunter's Wanderings in Africa.* By F. C. Selous. (Richard Bentley, 1895.)
16. *British Central Africa.* By Sir H. H. Johnston. (Methuen, 1897.)
17. *On the Threshold of Central Africa.* Contains a full, careful description of the Upper Zambezi and an account of the subjects of Chief Lewanika. By Francois Coillard. (Methuen, 1898.)
18. *Exploration and Hunting in Central Africa.* By Major A. St. H. Gibbons. (Methuen, 1898.)
19. *Among the Wild Angoni.* By W. A. Elmslie. (Oliphant, Anderson and Farrar, 1899.)
20. *The Kingdom of the Barotse.* By A. Bertrand. (T. Fisher Unwin, 1899.)
21. *Three Years in Savage Africa.* By Lionel Decle. (Methuen, 1900.)
22. *In Remotest Barotseland.* By Colonel C. Harding. (Hurst and Blackett, 1905.)

23. *Coillard of the Zambezi*. By C. W. Mackintosh. (T. Fisher Unwin, 1908.)
24. *Via Rhodesia*. By Charlotte Mansfield. (Stanley Paul and Co., 1910.)
25. *The Great Plateau of Northern Rhodesia*. By H. Gouldsbury and H. Sheane. (Arnold, London, 1911.)
26. *In South Central Africa*. By T. M. Moubray. (Constable and Co., 1912.)
27. *Thinking Black*. By D. Crawford. (Morgan and Scott, 1912.)
28. *Missionary Travels in Central Africa*. By F. S. Arnot. (Alfred Holms, 1914.)
29. *Gold and the Gospel in Mashonaland, 1888*. Being the journals of (1) The Mashonaland Mission of Bishop Knight and (2) The Concession Journey of Charles Dunell Rudd, edited respectively by Constance E. Fripp, M.B.E. and V. W. Hiller. Oppenheimer, Series No. 4. (Chatto and Windus, 1949.)

B.—SOCIOLOGICAL STUDIES

1. *Native Tribes of North-Eastern Rhodesia*. By J. C. C. Coxhead. (London Royal Anthropological Institute, 1914.)
2. *The Ila Speaking Peoples of Northern Rhodesia*. By Rev. W. E. Smith and Captain A. M. Dale. (Macmillan and Co., 1920.)
3. *In the Heart of Bantu Land*. By Dougald Campbell. (Seeley Services, 1922.)
4. *In Witch-bound Africa*. By F. H. Melland. (Seeley Services, 1923.)
5. *Barotseland*. By D. W. Stirke. (John Bale and Sons.)
6. *The Lambas of Northern Rhodesia*. By C. M. Doke. (Harrap, London, 1931.)
7. *Modern Industry and the African*. By J. Merle Davis. (Macmillan, 1943.)
8. *The Native Tribes of the Eastern Province of Northern Rhodesia*. By E. H. Lane Poole (Govt. Printer, 1938.)
9. *Land, Labour and Diet in Northern Rhodesia*. By Audrey I. Richards. (International Institute of African Languages and Culture. Oxford University Press, 1939.)
10. *Copperbelt Markets*. By W. V. Brelsford. (Govt. Printer, 1947.)
11. *The Succession of Bemba Chiefs*. By W. V. Brelsford. (Govt. Printer, 1948.)
12. *Seven Tribes of British Central Africa*. Ed. by E. Colson and Max Gluckman. (Oxford University Press, 1951.)
13. *Labour Conditions in Northern Rhodesia*. By Major D. Orde-Browne. (His Majesty's Stationery Office.)

C.—GENERAL

1. *Hunting Trips in Northern Rhodesia*. By Denis Lyell. (*The Field*, 1910.)
2. *A Pathfinder in South Central Africa*. By Rev. E. W. Chapman. (W. A. Hammond, 1910.)
3. *Big Game Hunting in North Eastern Rhodesia*. By Owen Letcher. (John Long, London, 1911.)
4. *Adventures Beyond the Zambesi*. By Mrs. F. Maturin. (Eveleigh Nash, 1913.)
5. *The Making of Rhodesia*. By H. Marshall Hole. (Macmillan and Co., 1926.)
6. *The Way of the White Fields in Rhodesia*. By Rev. E. W. Smith. (World Dominion Press, London, 1928.)
7. *Eighteen Years on Lake Bangweulu*. By J. E. Hughes. (*The Field*, 1933.)
8. *Autobiography of an Old Drifter*. By P. M. Clark. (George Harrap, 1936.)
9. *Chirupula's Tale*. By J. E. Stephenson. (Geoffrey Bles, 1937.)
10. *Elephants in Africa*. By F. Melland. (*Country Life*, 1938.)

11. *Africa Looks Ahead*. By W. S. Fisher and J. Hoyte. (Pickering and Inglis, 1938.)
12. *The Lake of the Royal Crocodiles*. By Eileen Bigland. (Hodder and Stoughton, 1939.)
13. *Plan for Africa*. By Rita Hindson. (Allen and Unwin, 1941.)
14. *The Northern Rhodesia Legislative Council*. By T. W. Davidson. (Faber and Faber, 1948.)
15. *Jungle Pathfinder*. By K. S. Rukavina. (Exposition Press, New York, 1950.)
16. *Native Administration in the British African Territories*. Vols. 2 and 4. By Lord Hailey. (H.M.S.O., 1951.)
17. *A Summary of the Provisional Geological Features of Northern Rhodesia*. By T. D. Guernsey. (1952.)
18. *A Prospector's Guide to Mineral Occurrences in Northern Rhodesia*. By T. D. Guernsey.
19. *Northern Rhodesia Handbook*. A Guide Book. Published by the Information Department, Lusaka.

D.—THE NORTHERN RHODESIA JOURNAL

Published twice a year, price 5s. per copy. Contains articles of general interest—history, natural history, memoirs, ethnology, etc., connected with Northern Rhodesia. Four numbers issued, two for 1950 and two for 1951.

GOVERNMENT PUBLICATIONS OBTAINABLE FROM GOVERNMENT PRINTER, LUSAKA

The Crown Agents for the Colonies, London, are agents for the sale of publications issued by the Northern Rhodesia Government.

A current list of publications is obtainable, free of charge, from the Government Printer, P.O. Box 136, Lusaka.

African Representative Council. Verbatim reports of proceedings, 1s.

Agricultural Bulletins—

No. 1 of 1950—Tobacco Root Knot Nematode. By J. C. Collins, 1s.

No. 2 of 1950—The Production of Flue-Cured Virginia Tobacco in Northern Rhodesia. By Allan Carr, 2s.

No. 1 of 1951—Flue-Cured Virginia Tobacco. By J. C. Collins, 2s.

No. 2 of 1951—Intensive Vegetable Growing for Africans. By B. C. Wills, 1s.

No. 3 of 1951—The Line Level and its Use in Soil Conservation. By M. Halcrow, 1s.

Agriculture. Report on Agricultural Industry, October, 1931, 2s.

Agricultural Survey. Report of Commission, 1929 (postage 8d.), 7s. 6d.

Annual Report on Northern Rhodesia for 1950. Issued by the Colonial Office, 2s. 6d.

Bemba Chiefs. By W. V. Brelsford, 1948, 3s. 6d.

Birds of Northern Rhodesia. A check list by C. M. N. White and J. M. Winterbottom, 1947, 2s. 6d.

Brickmaking. By C. W. Kiln, 1s.

Cattle Industry. Memorandum compiled by Veterinary Department, 1937, 1s.

Census of Population. October, 1946, 7s. 6d.

Census of Population. May, 1951, 1s.

Central African Council:

Report of Organisation and Research. By Dr. J. E. Keyston, 1949, 5s.

Central African Territories:

- Report of Conference on Closer Association*, 1951, 1s. 3d.
- Comparative Survey of Native Policy*, 1951, 2s.
- Copperbelt Markets*. By W. V. Brelsford, 2s.
- Cost of Living*. Final Report of the Commission, 1950, 5s.
- Development Authority Report*. June, 1948, to December, 1949, 2s.
- Development, The Ten-year Plan*. February, 1947, 2s.
- Development, The Ten-year Plan*. Second (1951) Review. November, 1951, 5s.
- Development, Industrial*. 1946, 2s.
- Development of Secondary Industries*. By Dr. W. J. Busschau, 1945, 2s. 6d.
- Departmental Annual Reports*. 1s. to 2s. 6d. each. (Apply to Government Printer for list.)
- Economic and Statistical Bulletin*. Published monthly by the Central African Office of Statistics, Salisbury, 6d.
- Education of Women and Girls*. Report, 6d.
- Estimates, Approved, for 1952*, 10s.
- Estimates, Approved, Development Fund*, 1952, 3s. 6d.
- European Education, Further Secondary*, 1946, 6d.
- European Education*. Investigation by Committee, 1948, 2s. 6d.
- European Housing*. Report of Committee, 1947, 1s.
- Fish Culture*. By T. Vaughan-Jones, Director of Game and Tsetse Control, 1947, 1s.
- Gazette, Official Government*. Published weekly:
 Within Northern Rhodesia and all other countries, annual subscription, 25s.
 Single copies for current year, 1s.
 Back numbers, 1s. 6d. per copy.
- Geographical, Historical and Economic Survey*, 1951, 1s. 3d.
- Geological Features of Northern Rhodesia*. A Summary of the Provisional, by T. D. Guernsey, 5s.
- Hansard*. Verbatim reports on proceedings of the Northern Rhodesia Legislative Council. No fixed price for annual subscription, 2s. 6d. each.
- Illegal Brewing*. Report of Inquiry, 1s.
- Import and Export List*, 1950, Official, 2s.
- Information for Intending Settlers*. Land Board. (Obtainable from the Secretary, Land Board, Lusaka.)
- Land Bank*. Committee Report Advising on Problems connected with the Establishment of in Northern Rhodesia. June, 1951, 2s. 6d.
- Land Board*. Constitution and Terms of Reference, 2s.
- Laws of Northern Rhodesia*. Revised to 31st December, 1951:
 Contained in seven loose-leaf volumes, £10 10s.
 Annual subscription, £2 2s.
 Separate Acts available (apply to Government Printer for list.)
- Law Reports of Northern Rhodesia*. Cases Determined by the High Court. (Volumes I, II and III out of print.) Volume IV (1948) £1 1s.
- Licence and Stamp Ordinance, Operation of*. Report of Committee, 1947, 5s.
- Maize Production, Cost of*. Report of Committee, 1948, 6d.
- Management Boards, Constitution of*, 1949, 2s.
- Mining and Explosives Regulations*, 1950, 2s.

- Native Locations in Urban Areas.* Report of Commission, 1943, 2s.
Native Taxation. Report of Committee, 1948, 1s.
Native Tribes of the Eastern Province, 1949, 7s. 6d.
Official Handbook of Northern Rhodesia. 1951 Edition, 2s. 6d.
Police Commission. Report of Commission of Inquiry, June, 1946, 7s. 6d.
Proposed Forty-hour Week in the Copper Mining Industry, 2s.
Register of Voters, 1s.
Semi-permanent Housing. By Desmond Agg, 5s.
Silicosis Hazard. Report of Investigation, 1948, 1s.
Small Earth Dam Construction. By T. W. Longridge, 1s.
Status and Welfare of Coloured Persons, 2s.
Trade of Northern Rhodesia, Statement of, 1950, £1 1s.
Vegetation and Soil Map of Northern Rhodesia. Compiled by C. G. Trapnell, 5s.
Water Reconnaissance. By Professor F. Debenham, 2s.

PUBLICATIONS OF RHODES-LIVINGSTONE MUSEUM, LIVINGSTONE

- The Material Culture of the Fort Jameson Ngoni.* By J. A. Barnes. 1948.
African Dances of Northern Rhodesia. By W. V. Brelsford. 1948.
The Material Culture of the Lunda-Lovale Peoples. By C. M. White. 1948.
African Music in Northern Rhodesia and some other places. By A. M. Jones. 1949.
Trade Routes, Trade and Currency in East Africa. By A. H. Quiggin. 1949.
Life Among the Cattle-Owning Plateau Tonga. By E. Colson. 1949.
The Discovery of Africa. By E. H. Lane-Poole. 1950.
Some Pioneer Missions of Northern Rhodesia and Nyasaland. By C. W. Mackintosh.
David Livingstone. Based on an Account by I. M. Fletcher.
The Stone Age Cultures of Northern Rhodesia. By J. Desmond Clark. Published by the South African Archaeological Society with the aid of a grant from the Museum Trustees.

PUBLICATIONS OF THE RHODES-LIVINGSTONE INSTITUTE, LIVINGSTONE

Paper

1. *The Land Rights of Individuals Among the Nyakyusa.* Godfrey Wilson. 1938. 52 pp. Out of print.
2. *The Study of African Society.* Godfrey Wilson and Monica Hunter. First printing, 1939. Second printing, 1942. 21 pp. Out of print.
3. *The Constitution of Ngonde.* Godfrey Wilson. 1939. 16 pp. Out of print.
4. *Bemba Marriage and Present Economic Conditions.* Audrey I. Richards. 1940. (Reprinting). 123 pp. Out of print.
5. *An Essay on the Economics of Detribalisation in Northern Rhodesia.* Part I. Godfrey Wilson. 71 pp. 13 tables. Out of print.
6. *An Essay on the Economics of Detribalisation in Northern Rhodesia.* Part II. Godfrey Wilson. 1942. 82 pp. 8 tables. Out of print.
7. *Economy of the Central Barotse Plain.* Max Gluckman. 1941. 130 pp. 24 photographs, 2 maps, 4 diagrams, 8 charts. Out of print.
8. *Good Out of Africa.* (A Study in the Relativity of Morals). A. T. Culwick. 64 pp. First printing, 1942. Second printing, 1943. 2s. (postage 1d.)

9. *The African as Suckling and as Adult*. (A Psychoanalytical Study). J. F. Ritchie. 99 pp. Out of print.
10. *Essays on Lozi Land and Royal Property*. Max Gluckman. 1943. 99 pp. Out of print.
11. *Some Aspects of Marriage and the Family Among the Nuer*. E. E. Evans-Pritchard. 1945. 2s. (postage 1d.)
12. *Fishermen of the Bangweulu Swamps*. W. V. Brelsford. 1948. 169 pp., photographs, maps, charts. 5s. (postage 5d.)
13. *Rooiyard*. (A Sociological Survey of an Urban Native Slum Yard). Ellen Hellmann. 1948. 125 pp., 1 diagram, 19 photographs. 7s. 6d. (postage 6d.)
14. *Land Holding and Land Usage among the Plateau Tonga of Mazabuka District*. (A reconnaissance Survey, 1945). W. Allan, M. Gluckman, D. U. Peters, C. G. Trapnell, J. H. M. McNaughton, D. W. Conroy. 1948. 192 pp., 4 maps, 47 tables. 8s. 6d.
15. *Studies in African Land Usage in Northern Rhodesia*. William Allan. 85 pp., maps, tables, diagrams. 7s. 6d. (postage 2d.)
16. *Malinowski's Social Theories*. M. Gluckman. 28 pp. 3s. (postage 1d.)
17. *The Pattern of Hera Kinship*. J. F. Holleman. 58 pp. 6s. (postage 2d.)
18. *Gusii Bridewealth Law and Custom*. Philip Mayer. 67 pp. 6s. 6d. (postage 2d.)
19. *Land Usage in Serenje District*. D. U. Peters. 99 pp. 10s. 6d. (postage 2d.)
20. *Marriage in a changing Society*. J. A. Barnes. 139 pp. 10s. 6d. (postage 2d.)
21. *History of the Luapula*. I. G. Cunnison.

RONEOED PUBLICATIONS

- Ngonde Initiation Ceremonies*. Lyndon Harries. 1945. 5s.
Kinship and Local Organisation of the Luapula. I. G. Cunnison. 1951. 5s. 3d.

HUMAN PROBLEMS IN BRITISH CENTRAL AFRICA RHODES-LIVINGSTONE JOURNALS

- Nos. 2, 3 and 4, 2s. 6d. each, plus postage.
 Nos. 5—10, 4s. each, plus postage.
 No. 11, 5s. plus postage.

APPENDICES

APPENDIX I THE TEN YEAR DEVELOPMENT PLAN OF NORTHERN RHODESIA

Expenditure to 31st December, 1951

	Total Cost £	Colonial Development Welfare £	Northern Rhodesia Development £	Loan £	Total £
Health					
African Medical Education (D 847)	224,000	—	4,141	—	4,141
Clinics—Leprosy and Rural Health Centres (D 847)	49,200	31,567	—	—	31,567
Rural Hospitals (D 847)	115,000	9,000	—	—	9,000
Lusaka Hospital Extensions	25,000	—	14,129	—	14,129
Broken Hill Hospital	700,000	—	468,740	—	640,293
Balovale Hospital	34,000	—	26,000	171,553	26,000
Stainless Steel Equipment	20,000	—	12,000	—	12,000
Choma Hospital	42,350	—	—	32,753	32,753
African Education					
Government School Buildings (D 894)	189,360	107,272	—	—	107,272
Building Grants (D 894)	300,000	125,491	—	—	125,491
Development Area Schools (D 894)	43,500	28,358	—	—	28,358
Mass Literacy Campaign (894)	5,000	3,429	—	—	3,429
African Secondary School	132,445	—	60,445	67,345	127,770
European Education					
Infants' Schools	302,290	—	—	223,000	223,000
Emmasdale School	6,150	—	—	500	500
Secondary School, Lusaka	261,550	—	—	18,500	18,500
Secondary School, Kitwe	120,000	—	—	4,350	4,350
Additional Classrooms	56,150	—	—	42,198	42,198
Hostel Extensions, Lusaka	18,666	—	—	8,342	8,342
Agriculture					
Research Services (R 416)	299,728	29,657	13,030	—	43,687
Extension Services Field Operations (D 1185)	178,190	9,618	38,471	—	48,089
Training of Africans (D 1142)	72,020	35,322	15,286	—	50,608
Capital Works Extension Services to African Agriculture (D923)	131,000	46,521	—	—	46,521
Soil Conservation	129,165	—	28,940	100,000	128,940
Tobacco Advisers	32,000	—	6,374	—	6,374
Pilot Groundnut Scheme	55,000	—	40,889	—	40,889
Forestry					
Forest School (D 851)	43,000	10,025	—	—	10,025
Utilisation and Timber Investigation	17,000	—	6,363	—	6,363
Capital Works for Forest Development (D 1063)	55,000	25,236	—	—	25,236
Forest Development and Improvement	95,000	—	45,516	—	45,516
Survey of Timber Resources (D 1047)	40,000	18,861	—	—	18,861
Specialist Officers (D 1062)	13,856	10,847	—	—	10,847
Veterinary					
Additional Equipment and Facilities	218,417	—	12,512	—	12,512
Capital Works Additional Staff	34,500	—	26,322	—	26,322
Veterinary Services (D 936)	170,000	39,587	—	—	39,587
Veterinary Experiments (D 1221)	44,025	7,647	597	—	8,244
T.I.F.A. Fog Spray Unit	3,887	—	3,681	—	3,681

Game and Tsetse Control									
Expansion of Departmental Services ..	..	..	199,891	—	99,925	—	—	99,925	—
Tsetse Control Feira (D 840) ..	..	..	21,720	19,331	—	—	—	19,331	—
Tsetse Survey Field Research Unit (R 343) ..	..	..	24,925	6,459	—	—	—	6,459	—
Fish Farming Development (D 1325) ..	..	..	45,118	15,715	2,332	—	—	18,047	—
Kafue National Park ..	..	..	27,097	—	8,285	—	—	8,285	—
Tsetse Control—Kafue Cattle Area Extension Scheme ..	..	..	4,243	—	3,573	—	—	3,573	—
Tsetse Control—Feira Extension Scheme ..	..	..	3,280	—	3,050	—	—	3,050	—
Tourist Development									
Tourist Office, Livingstone ..	..	..	2,638	—	—	—	138	138	—
Rest Camps ..	..	..	7,600	—	—	—	7,600	7,600	—
Miscellaneous Works ..	..	..	1,000	—	—	—	1,000	1,000	—
Co-operative Societies									
Loans ..	..	..	10,000	—	—	—	2,000	2,000	—
Rural Development									
Development Centre Capital Works (D 1104) ..	..	..	128,500	55,775	—	—	—	55,775	—
Development Areas Capital Works (D 1104) ..	..	..	131,000	42,109	—	—	—	42,109	—
Development Areas Recurrent Expenses (D 1104) ..	..	..	355,000	16,820	16,820	—	—	33,640	—
Expert Investigations (D 1104) ..	..	..	7,000	408	—	—	—	408	—
Headquarters Expenditure ..	..	..	15,000	—	2,531	—	—	2,531	—
Import of Cattle from Tanganyika ..	..	..	40,000	—	6,415	—	—	6,415	—
Hydrological Survey—Lukanga Swamps (D 1416) ..	..	..	2,940	2,940	—	—	—	2,940	—
Nutrition and Health Scheme Kawambwa District (D 1540) ..	..	..	55,660	1,000	—	—	—	1,000	—
Posts and Telegraphs									
Linking District Headquarters by Radio ..	..	..	38,000	—	32,928	—	—	32,928	—
Mechanisation of Savings Bank and Main Post Offices ..	..	..	19,000	—	2,784	—	—	2,784	—
Rural Post Offices ..	..	..	44,870	—	4,628	—	—	4,628	—
Branch and New Post Offices ..	..	..	8,325	—	—	—	—	—	—
African Learners' School ..	..	..	1,550	—	867	—	—	867	—
Main Trunk Telephones Line of Rail ..	..	..	149,000	—	—	117,296	117,296	117,296	—
Lusaka-Chirundu-Salisbury Link ..	..	..	35,000	—	—	18,112	18,112	18,112	—
Roads									
Class I—Lusaka, Broken Hill and Copperbelt ..	..	..	815,000	—	—	600,677	600,677	600,677	—
Lusaka-Chirundu ..	..	..	503,000	—	119,700	200,800	200,800	320,500	—
Classes II, III, IV ..	..	..	254,000	—	—	146,100	146,100	146,100	—
Bridges, Culverts ..	..	..	150,000	—	—	42,750	42,750	42,750	—
Aerodromes									
Livingstone Airport ..	..	..	867,000	—	—	867,000	867,000	867,000	—
Water Development									
Water Supplies ..	..	..	650,000	—	648,655	—	—	648,655	—
Irrigation ..	..	..	289,044	—	50,660	—	—	50,660	—
Public Works and Public Utilities									
Public Works Department Staff ..	..	..	150,000	—	84,195	—	—	84,195	—
Lusaka Water Supply ..	..	..	410,000	—	355,450	—	—	355,450	—
Lusaka Electricity Supply ..	..	..	235,000	—	—	76,810	76,810	76,810	—
European Staff Housing ..	..	..	2,000,000	—	618,366	1,190,611	1,190,611	1,718,977	—
African Staff Housing ..	..	..	600,000	—	48,000	376,089	376,089	424,089	—
Grants to District Road Boards ..	..	..	50,000	—	22,730	—	—	22,730	—
Stores Department Buildings ..	..	..	77,500	—	—	61,340	61,340	61,340	—
Police Camps, Wusikili and Luanshya ..	..	..	96,156	—	—	85,185	85,185	85,185	—
Transfer of Departments to Lusaka ..	..	..	500,000	—	—	140,462	140,462	140,462	—
Prisons ..	..	..	172,000	—	—	29,489	29,489	29,489	—
Urban African Housing ..	..	..	1,000,000	—	—	939,199	939,199	939,199	—

APPENDIX II

POPULATION STATISTICS

Table I

POPULATION AT CENSUS DATES

Census Date	Census Results			Population Estimates	
	European	Asiatic	Coloured	Domiciled Indigenous Africans	Total
7th May, 1911 ..	1,497	39	(b)	820,000(a)	821,536
3rd May, 1921 ..	3,634	56	145	980,000	983,835
5th May, 1931 ..	13,846	176	425	1,330,000	1,344,447
15th October, 1946	21,907(c)	1,117	804	1,660,000	1,683,828
8th May, 1951 ..	37,221	2,529	1,092	1,700,577	1,741,419

(a) Including Coloureds.

(b) Included with Africans.

(c) Including 3,181 Polish evacuees in camp.

APPENDIX II—*contd.*

Table II

ANNUAL POPULATION ESTIMATES, 1912-1951

(Based on estimates of the British South Africa Company from 1912 to 1923 and estimates of the Northern Rhodesia Government from 1924 onwards.)

Year Ended 30th June	European	Asiatic and Coloured	African
1912	1,700	(a)	830,000
1913	2,100	(a)	840,000
1914	2,300	(a)	870,000
1915	2,000	(a)	860,000
1916	2,100	(a)	870,000
1917	2,200	(a)	880,000
1918	2,400	(a)	900,000
1919	2,600	(a)	930,000
1920	3,000	(a)	950,000
1921	3,700	200	980,000
1922	3,700	200	980,000
1923	3,700	300	980,000
1924	4,000	300	1,050,000
1925	4,400	400	1,130,000
1926	5,100	400	1,170,000
1927	6,600	400	1,220,000
1928	7,400	500	1,260,000
1929	8,700	500	1,280,000
1930	11,100	600	1,310,000
1931	13,800	600	1,350,000
1932	11,000	700	1,380,000
1933	10,700	700	1,380,000
1934	11,500	800	1,370,000
1935	10,700	800	1,370,000
1936	10,000	900	1,400,000
1937	11,300	1,000	1,430,000
1938	13,000	1,100	1,450,000
1939	13,100	1,300	1,480,000
1940	14,300	1,400	1,500,000
1941	15,100	1,400	1,530,000
1942	14,800	1,300	1,560,000
1943	18,000	1,600	1,580,000
1944	19,200	1,700	1,610,000
1945	20,800	1,700	1,630,000
1946	21,800	1,900	1,520,000
1947	25,100	2,100	1,550,000
1948	28,800	2,300	1,580,000
1949	32,000	2,800	1,610,000 (b)
1950	36,000	3,100	1,849,600 (b)
1951	38,200	3,700	1,905,000 (b)

(a) Not available.

(b) Provisional.

APPENDIX II—*contd.*

Table III

EUROPEAN BIRTHS, DEATHS, MARRIAGES AND
INFANT MORTALITY, 1938-1950

Year	Births		Marriages	Deaths		Infant Mortality	
	No.	Per 1,000	No.	No.	Per 1,000	No.	Per 1,000 Live Births
1938	355	27.31	137	131	10.08	10	20.47
1939	378	28.85	167	108	8.24	7	18.50
1940	520	36.36	187	108	7.55	15	30.06
1941	490	32.45	157	137	9.07	13	26.53
1942	559	37.77	174	131	8.85	17	30.45
1943	501	27.83	182	136	7.56	17	32.69
1944	586	30.52	169	162	8.44	25	42.68
1945	602	28.93	194	153	7.36	21	36.65
1946	650	29.81	211	155	7.11	25	38.46
1947	740	29.48	292	171	6.81	33	44.59
1948	840	29.17	315	158	5.56	27	32.14
1949	867	27.09	265	160	5.00	21	27.68
1950	1,060	29.44	334	187	5.19	27	25.50

APPENDIX III

Table I

INCOME TAX AND ESTATE DUTY

Rates of Tax :

<i>Unmarried :</i>	s.	d.
For every pound of the first £500 . . .	2	0
For every pound of the next £250 . . .	3	0
For every pound of the next £250 . . .	4	0
For every pound of the next £250 . . .	5	0
For every pound of the next £250 . . .	6	0
For every pound of the next £250 . . .	7	0
For every pound in excess of £1,750 . . .	7	6

Married :

For every pound of the first £250 . . .	1	0
For every pound of the next £250 . . .	1	6
For every pound of the next £250 . . .	2	0
For every pound of the next £250 . . .	3	0
For every pound of the next £250 . . .	4	0
For every pound of the next £250 . . .	5	0
For every pound of the next £500 . . .	6	0
For every pound of the next £500 . . .	7	0
For every pound in excess of £2,500 . . .	7	6

The Company rate of tax is 7s. 6d. in the £.

Table II

TAX PAYABLE BY INDIVIDUALS

Income	Unmarried	Married No Children	Married Two Children
£	£ s. d.	£ s. d.	£ s. d.
300	5 0 0	—	—
400	15 0 0	—	—
500	25 0 0	—	—
600	35 0 0	5 0 0	—
700	45 0 0	10 0 0	—
800	57 10 0	16 5 0	—
900	72 10 0	23 15 0	5 0 0
1,000	87 10 0	31 5 0	10 0 0
1,100	107 10 0	41 5 0	16 5 0
1,200	127 10 0	51 5 0	23 15 0
1,300	150 0 0	63 15 0	31 5 0
1,400	175 0 0	78 15 0	41 5 0
1,500	200 0 0	93 15 0	51 5 0
2,000	362 10 0	206 5 0	133 15 0
2,500	550 0 0	356 5 0	266 5 0
3,000	737 10 0	531 5 0	426 5 0

APPENDIX III—*contd.*

Table III

ESTATE DUTY

Where the Principal Value of the Estate exceeds £	And does not exceed £	Estate Duty shall be payable at the rate of
2,000	5,000	1 per cent.
5,000	7,500	2 per cent.
7,500	10,000	3 per cent.
10,000	20,000	4 per cent.
20,000	40,000	5 per cent.
40,000	70,000	6 per cent.
70,000	100,000	7 per cent.
100,000	200,000	8 per cent.
200,000	300,000	9 per cent.
300,000		10 per cent.

Where an estate is inherited by a surviving spouse, half the above rates only are charged on the first £10,000.

APPENDIX IV
Table I
COMPARATIVE STATEMENT OF REVENUE FOR THE PAST SIX YEARS

Head of Revenue	1946	1947	1948	1949	1950	1951 Revised Estimates
<i>Ordinary</i>						
1. Customs	806,257	863,377	976,725	1,697,913	1,723,677	2,362,500
2. Licences, Taxes, etc.	1,919,022	2,701,437	4,484,652	7,008,211	8,208,288	10,654,275
3. Fees of Court, etc.	72,055	103,251	340,267	488,881	526,883	575,844
4. Post Office	125,301	142,181	164,124	193,551	207,081	261,600
5. Rent from Government Property	18,898	17,652	22,076	19,711	24,486	22,670
6. Interest and Loan Repayments	144,474	172,797	194,772	262,886	351,705	394,736
7. Miscellaneous	172,486	238,558	94,040	168,530	781,358	64,545
8. Lusaka Electricity and Water Undertakings	24,566	26,460	31,059	34,607	44,442	57,500
9. Land Sales	7,012	12,926	9,247	13,467	21,885	17,000
10. Advances to Development Fund reimbursed	—	—	—	—	—	—
11. Appropriation from General Revenue Balance	—	94,402	—	—	—	—
11. Share of Revenue from Mineral Rights	—	—	—	—	169,415	—
Total Recurrent Revenue	3,290,071	4,373,041	6,316,962	9,887,757	12,059,220	15,632,472
<i>Development Fund</i>						
96. Grants under Colonial Development and Welfare Account	72,070	24,287	139,174	208,743	377,998	400,660
97. Appropriation from Territorial Revenue	—	136,804	259,381	487,363	1,535,035	1,500,000
98. Reimbursements from other Governments	—	—	—	—	5,354	2,775
99. Loan Appropriation	—	—	—	—	100	—
Other Receipts	—	—	—	—	—	300
Total Development Revenue	72,070	161,091	398,555	696,106	1,918,487	1,903,735

Table II

COMPARATIVE STATEMENT OF EXPENDITURE FOR THE PAST SIX YEARS

Head of Expenditure	1946	1947	1948	1949	1950	1951 Revised Estimates
1. Charges on Account of Public Debt	£ 131,130	£ 206,921	£ 168,537	£ 168,031	£ 295,241	£ 462,692
2. Pensions and Gratuities	108,033	127,522	136,603	153,376	213,254	214,149
3. The Governor	8,550	13,317	12,528	13,567	13,737	13,121
4. Accountant-General	13,233	16,824	24,462	39,624	40,547	56,408
5. Administrator-General, Official Receiver and Custodian of Enemy Property	1,037	1,846	2,384	3,996	3,395	3,836
6. African Administration	74,025	74,338	93,687	120,968	125,922	138,173
7. African Education	133,232	188,178	277,866	391,148	413,929	504,504
8. Agriculture	60,694	53,530	67,230	92,339	111,546	185,643
9. Audit	8,327	10,348	10,348	14,377	16,284	18,616
10. Civil Aviation	—	49,171	90,966	97,070	98,129	124,291
11. Co-operative Societies	—	—	(a)	14,205	21,130	32,882
12. Customs	51,949	61,389	87,189	37,823	42,316	49,849
13. European Education	85,549	119,624	144,086	223,312	311,530	405,710
14. Forestry	(b)	20,399	31,064	120,851	79,971	110,304
15. Game and Tsetse Control	28,186	27,702	33,136	53,092	70,457	84,738
16. Health (including Slicosis Medical Bureau)	205,933	275,459	326,981	421,882	521,868	677,275
17. Income Tax	57,257	278,970	18,871	11,002	12,167	15,265
18. Information	9,648	12,653	17,121	27,438	28,565	37,383
19. Judicial	17,472	22,713	27,443	34,555	38,262	41,309
20. Labour and Mines	13,534	17,993	21,580	49,548	60,015	71,680
21. Legal	6,217	7,763	8,980	10,148	12,368	10,818
22. Loans	(c)	(c)	(c)	346,910	257,887	439,796
23. Local Government and African Housing	27,167	23,033	38,895	16,610	84,152	89,182
24. Lusaka Electricity and Water Undertakings	24,779	36,536	38,883	48,690	51,748	82,472
25. Military	58,883	51,171	57,041	54,750	250,333	404,100
26. Miscellaneous Services	423,607	748,173	1,332,853	1,895,593	1,984,721	2,278,310
27. Northern Rhodesia Police	108,518	126,663	194,372	279,374	366,057	500,259
28. Posts and Telegraphs	92,325	116,451	139,172	183,864	278,140	351,753
29. Printing and Stationery	24,774	40,677	61,224	91,395	92,990	147,703
30. Prisons	39,965	42,613	55,406	74,844	79,306	96,714
31. Provincial Administration	145,033	167,408	225,532	288,875	312,728	353,145
32. Public Works Department	73,190	93,711	126,989	250,010	292,373	328,442
33. Public Works Recurrent	209,280	297,936	210,882	430,255	526,865	653,323
34. Public Works Extraordinary	273,621	406,927	631,807	463,135	430,652	626,607
35. Secretariat (including Executive and Legislative Councils, Development and Unofficials in charge of Departments)	49,390	66,541	92,233	124,412	139,475	148,231
36. Stores and Transport (including Zambesi River Transport)	64,704	166,625	445,291	506,105	194,769	189,312

37. Subventions	..	..	..	..	..	38,281	174,050	295,019	109,796	30,311	135,735
38. Surveys and Land	..	..	..	..	..	24,883	22,232	26,991	40,124	43,531	58,091
39. Veterinary	..	..	..	..	..	48,521	56,676	83,209	85,407	110,963	130,612
40. Water Development and Irrigation	..	..	..	..	..	(d)	2,423	77,166	99,251	143,520	183,516
41. African Labour Corps	..	..	..	..	..	17,874	37,073	48,685	55,144	43,247	42,402
42. Emergency Economic Controls	..	..	..	..	..	15,017	14,457	23,727	35,373	45,495	59,242
43. Minor Services	..	..	..	..	..	—	—	—	—	94,123	161,380
44. Territorial Appropriations	..	..	..	..	..	—	—	—	2,250,000	2,207,675	4,414,000
Mines	..	..	..	..	..	(e)	7,004	9,932	(f)	(f)	(g)
Native Newspaper	..	..	..	..	..	1,839	(g)	(g)	(g)	(g)	—
Items not repeated	..	..	..	..	..	13,858	6,161	—	—	—	—
Total Recurrent Expenditure	..	..	..	..	..	2,789,515	4,289,023	5,816,371	9,828,269	10,591,694	15,132,973
Less Appropriation to Development Fund	..	..	..	..	..	—	—	—	1,500,000	1,535,035	1,500,000
Sub-total	..	..	..	..	..	2,789,515	4,289,023	5,816,371	8,328,269	9,056,659	13,632,973
Development Fund Expenditure	..	..	..	..	..	109,273	245,109	392,084	772,188	—	—
(a) From Colonial Development and Welfare Funds	..	..	..	..	..	—	—	—	—	269,415	400,660
(b) On Northern Rhodesia Development Account	..	..	..	..	..	—	—	—	—	1,069,505	2,315,248
(c) Loan Expenditure	..	..	..	..	..	—	—	—	—	2,213,311	1,871,381
Total Recurrent and Development Expenditure	..	..	..	..	..	2,898,788	4,534,132	6,208,455	*9,100,457	*12,608,890	18,220,262

(a) Included under "Secretariat". (b) Included under "Agriculture". (c) Included under "Subventions". (d) Included under "Public Works".

(e) Included under "Surveys and Land". (f) Included under "Labour and Mines". (g) Included under "Information".

* Figures adjusted for Development Fund Expenditure.

APPENDIX V

Table I

DIRECTION OF TRADE: MERCHANDISE

Country of origin (of imports) and Destination (of Exports)	Total Imports		Exports of Northern Rhodesia Produce		Re-exports	
	1950	1951	1950	1951	1950	1951
	£	£	£	£	£	£
United Kingdom ..	10,613,148	12,342,436	23,857,446	38,866,765	11,097	26,001
Canada	382,465	429,186	27	108	64	328
Australia	358,253	717,885	309,136	591,055	861	819
India	450,258	536,461	1,430,477	293,851	197	144
Hong Kong	140,840	166,539	294	1	—	7
Ceylon	53,649	74,823	—	—	—	—
Kenya	15,812	13,794	2,173	1,252	3,146	10,668
Nyasaland	37,282	31,736	4,224	1,977	47,834	18,632
Southern Rhodesia ..	3,441,988	4,648,576	1,203,131	2,059,326	313,412	378,325
Union of South Africa	7,378,846	10,464,552	4,510,151	8,998,523	193,247	157,866
Other British	74,596	129,950	30,740	17,328	40,015	15,142
Total British	22,947,137	29,555,938	31,347,799	50,830,186	609,873	607,932
Austria	28,851	79,681	4,899	—	—	—
Belgium	101,149	249,233	1,735,359	2,068,668	315	1
Belgian Congo	267,726	533,081	188,761	364,444	54,378	81,690
Denmark	32,812	15,113	274,744	5	—	1
Finland	21,480	34,370	14,699	10,187	—	—
France	154,316	147,612	316	71	216	12
German Fed. Republic	102,324	465,410	2,270,236	2,803,811	14	—
Netherlands	48,619	55,619	162,175	675,199	—	666
Italy	187,722	686,074	117,214	96,708	2	101
Norway	30,455	35,554	2	—	15	2
Poland	37	267	66,234	—	4	—
Portugal	10,259	17,382	4,498	—	—	—
Sweden	76,968	103,249	2,364,829	3,017,545	5	12
Switzerland	40,374	75,367	11	18,996	—	182
Japan	92,289	343,443	10,540	20,416	—	10
Iran (Persia)	525,818	658,282	—	—	—	—
United States	1,959,316	2,070,798	10,821,064	6,459,741	1,174	467
Other Foreign	82,823	250,590	17,036	29,946	4,064	364
Total Foreign	3,763,338	5,821,125	18,052,617	15,565,737	60,187	83,508
All Countries	26,710,475	35,377,063	49,400,416	66,395,923	670,060	691,440

Table II

TOTAL IMPORTS BY CLASSES

Class and Description		1950	1951
		£	£
I a b c	Animals, agricultural and pastoral products	489,760	770,639
I d	Foodstuffs	1,955,620	3,142,987
II a	Ales, spirits, wines, etc., potable	497,427	368,064
II b	Spirits, etc., non-potable	18,923	21,763
III	Tobacco	517,997	629,093
IV	Fibres, yarns, textiles, etc.	3,975,500	6,280,943
V	Metals and manufactures of	12,261,774	14,306,820
VI	Minerals, earthenware, glassware, etc.	1,424,031	1,867,679
VII	Oils, waxes, resins, paints, etc.	1,381,534	2,022,751
VIII	Drugs, chemicals, etc.	648,776	893,397
IX	Leather, rubber and articles of	791,947	1,167,653
X	Wood, cane and articles of	769,444	1,133,775
XI	Books, paper and stationery	379,026	559,895
XII	Jewellery, timepieces, fancy goods and musical in-		
	struments	298,641	433,063
XIII	Miscellaneous	1,300,075	1,778,541
Total Merchandise		26,710,475	35,377,063

APPENDIX V—*contd.*

Table III

TOTAL EXPORTS, INCLUDING RE-EXPORTS, BY CLASSES

Class and Description						1950	1951
						£	£
I	<i>a b c</i>	Animals, agricultural and pastoral products	..	..	..	380,698	504,602
I	<i>d</i>	Foodstuffs	..	..	..	193,580	287,927
II	<i>a</i>	Ales, spirits, wines, etc., potable	..	..	..	361	7,296
II	<i>b</i>	Spirits, etc., non-potable	..	..	..	7	108
III		Tobacco	..	..	..	1,004,953	1,639,481
IV		Fibres, yarns, textiles, etc.	..	..	..	255,143	143,552
V		Metals and manufactures of	..	..	..	47,840,750	64,003,627
VI		Minerals, earthenware and glassware, etc.	..	..	..	23,229	26,659
VII		Oils, waxes, resins, paints, etc.	..	..	..	24,530	49,722
VIII		Drugs, chemicals, etc.	..	..	..	5,146	7,920
IX		Leather, rubber and articles of	..	..	..	10,883	15,529
X		Wood, cane and articles of	..	..	..	207,094	254,756
XI		Books, paper and stationery	..	..	..	8,574	12,513
XII		Jewellery, timepieces, fancy goods and musical instruments	..	..	..	12,188	18,401
XIII		Miscellaneous	..	..	..	103,340	115,270
Total Merchandise						50,070,476	67,087,363

APPENDIX VI

BUILDING PERMITS GRANTED DURING JANUARY—DECEMBER, 1951. (Including Mine Townships.)

Month	Total Value of Applica- tions Approved	Residences	No. of Permits Issued	Per cent. of Total Value	Other Buildings	No. of Permits Issued	Per cent. of Total Value	African Housing	No of Permits Issued	Per cent. of Total Value
January	£ 289,958	£ 179,481	39	% 62	£ 110,477	49	% 38	£ —	—	% —
February	400,295	232,320	111	58	167,405	42	42	480	3	—
March	244,318	145,709	54	60	47,379	17	19	51,230	6	21
April	264,789	111,046	41	42	153,743	23	58	—	—	—
May	589,788	406,277	65	68.8	51,911	27	8.8	131,600	2	22.4
June	496,300	359,930	71	73	136,370	47	27	—	—	—
July	314,808	246,008	94	78	68,800	21	22	—	—	—
August	672,084	416,335	144	62	255,749	52	33	—	—	—
September	415,105	315,165	202	76	99,940	26	24	—	—	—
October	578,773	449,935	137	78	128,838	42	22	—	—	—
November	719,503	332,861	102	46	298,442	35	42	88,200	646	12
December	358,467	213,229	75	59	145,238	56	41	—	—	—
	5,344,098	3,408,296	1,135	762.8	1,664,292	437	381.8	271,510	657	55.4
				=63.7%			=31.3%			=5%

Proportion—Residential 63.7% ; Commercial and Industrial 31.3% , African Housing 5%.

APPENDIX VII
ASSESSABLE VALUATIONS AND RATES

	Ndola	Livingstone	Broken Hill	Chingola	Fort Jameson	Luanshya	Lusaka	Mufulira
Gross rateable value of buildings	..	£ 2,473,915	£ 1,432,865	£ 341,635	£ 233,853	£ 516,105	£ 3,043,100	£ 552,752
Gross rateable value of land	..	433,130	265,525	148,810	41,098	34,090	1,253,225	192,260
Rateable value of exempt buildings	..	246,715	464,778	93,910	9,420	41,550	336,675	72,300
Rateable value of exempt land	..	80,515	103,230	8,110	640	5,425	186,160	20,715
Rate in the £ on buildings	..	2d.	3d.	1d.	2½d.	2.4d.	1½d.	¼d.
Rate in the £ on land	..	8d.	4d.	4d.	6d.	4.8d.	6d.	3d.
Product of rate on buildings	..	17,704	12,012	1,423	2,338	£ s. d. 4,745 11 0	£ s. d. 19,019 7 6	£ s. d. 575 16 8
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